



STATE OF UTAH - DEPARTMENT OF ADMINISTRATIVE SERVICES

Division of Facilities Construction and Management

DFCM

Request for Proposals for Design/Build Services Stage II

Value Based Selection Method

August 6, 2007

HAVEN J. AND BONNIE RAE BARLOW TECHNOLOGY/MANUFACTURING BUILDING DAVIS ATC CAMPUS

**UTAH COLLEGE OF APPLIED
TECHNOLOGY
KAYSVILLE, UTAH**

DFCM Project No. 07036220

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Stage I of the Design/Build RFP is incorporated by reference. The requirements and results of Stage I are also made a part of Stage II.

Current copies of the following documents are hereby made part of this Request for Proposals for Design/Build Services. These documents are available on the DFCM web site at <http://dfcm.utah.gov> or are available upon request from DFCM.

DFCM Design Manual dated March 15, 2006

DFCM General Conditions dated May 25, 2005

DFCM Application and Certificate for Payment dated May 25, 2005

The Agreement and General Conditions dated May 25, 2005 have been updated from versions that were formally adopted and in use prior to this date. The changes made to the General Conditions are identified in a document entitled Revisions to General Conditions that is available on DFCM's web site at <http://dfcm.utah.gov>

INVITATION TO SUBMIT PROPOSALS

**ONLY DESIGN/BUILD TEAMS PREVIOUSLY SHORT-LISTED DURING
STAGE I ARE ALLOWED TO SUBMIT ON THIS PROJECT**

The State of Utah - Division of Facilities Construction and Management (DFCM) intends to hire a Design/Build Team comprised of a General Contractor supported by subcontractors and an A/E with supporting technical consultants to design and construct the following project:

HAVEN J. AND BONNIE RAE BARLOW TECHNOLOGY/MANUFACTURING BUILDING
DAVIS ATC CAMPUS - UTAH COLLEGE OF APPLIED TECHNOLOGY – KAYSVILLE, UTAH
DFCM PROJECT NO. 07036220

The project estimated cost is \$11,700,000. The Haven J. and Bonnie Rae Barlow Technology/Manufacturing Building will be a new one-story, high-bay, 57,450 gross square feet (GSF) facility. The programs to be housed in this new facility are Heavy Duty Diesel, Machining Technology, Industrial Automation Maintenance, and Computer Aided Drafting and Design.

Company	Contact	Fax
Big-D Construction	Rob Moore	415-6900
Gramoll Construction	Ken Romney	295-2356
Okland Construction	Tom Dalton	486-7570

The Stage II RFP documents will be available at 4:00 PM on Monday, August 6, 2007 in electronic format on CDs from DFCM at 4110 State Office Building, Salt Lake City, Utah 84114, telephone (801)538-3018 telephone and on the DFCM web page at <http://dfcm.utah.gov>. For questions regarding this project, please contact Lyle Knudsen, Project Manager, DFCM, at (801) 538-3275. No others are to be contacted regarding this project.

A **MANDATORY** pre-proposal site meeting will be held at 1:30 PM on Thursday, August 16, 2007 in the Board Room at the Davis ATC Campus, 550 East 300 South, Kaysville, Utah. All short listed Contractors and Architects wishing to bid on this project must attend this meeting.

The proposal documents that are requested in the RFP must be submitted to DFCM at 4110 State Office Building, Salt Lake City, Utah 84114, by the dates and times shown in the Project Schedule.

A bid bond in the amount of five percent (5%) of the proposal amount, made payable to the Division of Facilities Construction and Management on DFCM's bid bond form, shall accompany the proposal.

The Division of Facilities Construction & Management reserves the right to reject any or all proposals or to waive any formality or technicality in any bid in the interest of the State.

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT
Marla Workman, Contract Coordinator
4110 State Office Bldg., Salt Lake City, Utah 84114

ADDITIONAL PROJECT DESCRIPTION

The Haven J. and Bonnie Rae Barlow Technology/ Manufacturing Building will be a new one-story, high-bay, 57,450 gross square feet (GSF) facility. The programs to be housed in this new facility are Heavy Duty Diesel, Machining Technology, Industrial Automation Maintenance, and Computer Aided Drafting and Design. The project is currently programmed at:

• Heavy Duty Diesel	17,070 NSF	23,102 GSF
• Machining Technology	12,650 NSF	17,120 GSF
• Industrial Automation Maintenance	6,000 NSF	8,120 GSF
• Computer Aided Drafting & Design	3,580 NSF	4,845 GSF
• Building Support Spaces	3,150 NSF	4,263 GSF
TOTAL	42,450 NSF	57,450 GSF

Heavy Duty Diesel Program Space Types:

• Service Bay	20 Total
• Open Shop Area	2 Total
• Repair/Maintenance Room	3 Total
• Classrooms	3 Total
• Faculty Open Office Workroom	1 Total
• Media/Video Library	1 Total
• Storage	3 Total

Machining Technology Program Space Types:

• Open Shop Area	2 Total
• Repair/Maintenance/Prep Room	2 Total
• Classrooms	2 Total
• Faculty Open Office Workroom	1 Total
• Storage	3 Total

Industrial Automation Maintenance Program Space Types:

• Shop Area	1 Total
• Classrooms	4 Total
• Faculty Open Office Workroom	1 Total
• Media/Video Library	1 Total
• Storage	1 Total

Computer Aided Drafting & Design Space Types:

• Classroom/Computer Lab	1 Total
• Multi-Media Studio	1 Total
• Faculty Open Office Workroom	1 Total
• Storage	1 Total

PROCUREMENT PROCESS

In addition to the procurement process requirements outlined in the Stage I RFP documents and addenda, the following procedures and requirements will apply to the final selection of the Design/Build Team offering the best value to the State.

1. Pre-Proposal Meetings

A **MANDATORY** pre-proposal site meeting will be held at 1:30 PM on Thursday, August 16, 2007 in the Board Room at the Davis ATC Campus, 550 East 300 South, Kaysville, Utah. All short listed Contractors and Architects wishing to bid on this project must attend this meeting.

2. Last Day to Submit Questions

All questions must be received at the office of DFCM no later than the date and time listed on the Project Schedule. Questions must be submitted in writing to Lyle Knudsen at DFCM.

3. Time

One of the selection criteria will be proposed contract time. The Design/Build Team will include in the management plan the schedule for completing the work including any items required by DFCM or the agency. A completion date prior to February 2, 2009 is requested, but not mandatory.

It is anticipated that an Agreement will be given to the contractor for signature following concurrence of the design and accepted scope of work, including any accepted deviations from the program, and accepted cost adjustment if required. The actual Notice to Proceed will be promptly issued following the return of the signed Agreement and bonds by the contractor. The actual completion date will be based on the contractor's proposed schedule, and any adjustments that are required due to the refined scope of work established following award, which are documented in the agreement; all as agreed to by the DFCM.

All plans, schedules, and the cost proposals are required to reflect the project design and construction time. Non-compliance with the schedule will not result in automatic disqualification; it will be evaluated by the Selection Committee in determining the final selection.

4. Design Proposal

The following is a list of all items to be submitted by the Design Proposal due date:

- Presentation Boards (one of each required drawing). Each board will be 24" x 36".
- Required Drawings (six sets). Each drawing sheet will be sized sufficient to demonstrate the detail of the drawings.
 - Site Drawing, including but not limited to:
 - Plan showing all site development: building footprints and floor elevations, roads, parking, drainage - Scale 1"=50'-0" (minimum).

- Circulation showing entries, exists, service access, site fire access lane, pedestrian paths, building entries, Scale 1"=50'-0" (minimum).
 - Landscaping, Scale 1"=50'-0" (minimum).
- Floor Plans for each floor of the building(s), Scale 1/8"=1'-0" (minimum).
- Elevations, including but not limited to:
 - All four elevations of the building(s), Scale 1/8"=1'-0" (minimum).
 - Unique elevations of other sections of the building(s), Scale 1/8"=1'-0" (minimum).
- Transverse and longitudinal sections, Scale 1/8"=1'-0" (minimum).
- Details as required to show design approach, and to demonstrate quality.
- One perspective view drawing
- Complete outline specifications (six sets)
- Adequate narrative description of each system (electrical, mechanical, plumbing, structural, security, etc. (six sets)
- A complete list of exclusions or exceptions from requirements listed in the requirements of the projects.

5. Final Management Plan

The Design/Build Team shall submit seven copies of a Final Management Plan by the time indicated on the Project Schedule. The Final Management Plan is an update and refinement of the Preliminary Management Plan. It should demonstrate how the Design/Build Team is organized, the role of team members, and how the team will work together to achieve the objectives of the project. It should identify decision making authority and point of contact.

The Final Management Plan should address how the Team will accomplish the objectives of the project, mitigate the project risks that are noted in the RFP as well as others identified by the Team, and address any other selection criteria not addressed elsewhere in the Team's submittals. It should include information on how the construction will be managed and address items such as security and safety controls, staging areas, delivery routes, crane locations, and interfaces required at the site with the using agency or institution. A project schedule should be included indicating how the Team will accomplish the desired completion timeframe.

The Final Management Plan should be concise yet contain sufficient information for evaluation by the Selection Committee.

6. Updated Statements of Qualifications

The Design/Build Team shall provide seven copies of the statements of qualification. The updated statement of qualifications is only required if there are any new members or change in members of the design build team. The format should follow that in Stage I.

7. Cost Proposal

Cost Proposals are required to be within the stated design/build budget of \$11,700,000. Before submitting a proposal, each Design/Build Team shall carefully examine the RFP, visit the site of the Work, fully inform themselves as to all existing conditions and limitations, and shall include in the Cost Proposal the cost of all items required by the RFP. The Team is responsible for complying with all applicable laws, building codes, rules and regulations.

The Cost Proposal, bearing original signatures, must be typed or handwritten in ink on the cost proposal form provided in the RFP and submitted in a sealed envelope at the location specified below prior to the deadline for submission of cost proposals indicated on the Project Schedule.

Bid bond security, in the amount of five percent (5%) of the proposal amount, made payable to the Division of Facilities Construction and Management, shall accompany the Cost Proposal. **THE BID BOND MUST BE ON THE BID BOND FORM PROVIDED IN THE PROCUREMENT DOCUMENTS IN ORDER TO BE CONSIDERED AN ACCEPTABLE PROPOSAL.**

If the bid bond security is submitted on a bid bond form other than DFCM's required bid bond form, and the bid security meets all other legal requirements, the contractor will be allowed to provide an acceptable bid bond by the close of business on the next business day following notification by DFCM of submission of a defective bid bond security. **NOTE: A cashier's check cannot be used as a substitute for a bid bond.**

All required submittals must be delivered to, and be received by, the Division of Facilities Construction and Management previous to the date and time indicated in the Project Schedule. Submittals received after the specified time will not be accepted. Please allow adequate time for delivery. If using a courier service, the submitting firm is responsible for ensuring that delivery will be made directly to the required location. It is your responsibility to allow for the time needed to park on Capitol Hill as recent construction activity has made the parking more difficult. Identification is required to enter the building. Late proposals will be disqualified and returned to the proposer unopened. One copy of the cost proposal is required.

8. Cost and Scope Adjustment Proposals

Design/Build Teams may submit Cost and Scope Adjustment Proposals with the Final Management Plan. Sufficient description of the adjustment as well as the impact on the Cost Proposal must be provided to allow for evaluation by the Selection Committee of the impact on scope, functionality, durability, long term cost efficiency and initial cost. The amount shown on the base Cost Proposal should not include the impact of the Cost and Scope Adjustment Proposals. The Cost and Scope Adjustment Proposals will be evaluated by DFCM and the user to determine if they are potentially acceptable. Prior to the interviews, each contractor will be notified as to which of their Cost or Scope

Adjustment Proposals are determined to be potentially acceptable and which ones will not be considered in the selection process. Only those Cost and Scope Adjustment Proposals that are determined to be potentially acceptable may be presented in the interview. Design/Build Teams may not submit additional Cost and Scope Adjustment Proposals after the deadline. Any new Cost and Scope Adjustment Proposal that is raised in the interview process that was not submitted prior to the deadline will not be considered in the selection process. The Cost and Scope Adjustment Proposals that are accepted will be included in the original contract.

9. Interviews

Interviews will be conducted with each of the finalist Design/Build Teams in which they may present their proposed design, Final Management Plan, Cost and Scope Adjustment Proposals, and schedule. The interview will also provide an opportunity for the Selection Committee to seek clarification of the Design/Build Team's proposal.

The proposed primary project management personnel, including the project manager and architect, should be in attendance. The project manager is the Design/Build Team's representative who will have full responsibility for the design and construction of the project. The project manager has overall job authority, will be in attendance at all job meetings, and is authorized by the contractor to sign any and all change orders in the field, if necessary. Unless otherwise noted, attendance of subconsultants and subcontractors is at the discretion of the Design/Build Team.

The method of presentation is at the discretion of the Design/Build Team. The interviews will be held on the date and at the place specified in the Project Schedule.

10. Selection Criteria

The following criteria will be used in ranking each of the Design/Build Teams. The team that is ranked the highest will represent the best value for the state. The criteria are not listed in any priority order. The Selection Committee will consider all criteria in performing a comprehensive evaluation of the proposal. Weights have been assigned to each criteria in the form of points.

- A. Design Proposal. **25 POINTS**. The Design/Build Teams design as presented in the drawings and specifications and as clarified in the interviews will be evaluated as to how well it meets the objectives of the project.
- B. Schedule. **9 POINTS**. The schedule will be evaluated as to how well it meets the objectives of the project. Unless other objectives are stated the shorter the design and construction duration that is evaluated to be feasible while maintaining safety and quality in conformance with the RFP is preferred. The team shall discuss during the interview the project

schedule identifying major work items with start and stop dates that are realistic and critical subconsultants and subcontractors and if they have reviewed and agree to the schedule. The overall completion date shown on the schedule will be used in the contract as the contract completion date.

- C. DFCM Past Performance Rating. **9 POINTS**. The lead construction firm and design firm for each Design/Build Team will be given a past performance rating. The rating will be based first on how well the team members did on past projects with DFCM. If a minimum of three DFCM past performance ratings are not available a rating will be established using any DFCM past performance ratings that are available, supplemented by references supplied by the Design/Build Teams at the time the Statement of Qualifications and Organization is submitted.
- D. Strength of Team. **24 POINTS**. Based on the Statements of Qualifications, Final Management Plan, and the interview, the Selection Committee shall evaluate the expertise and experience of the team and the project lead as it relates to this project in size, complexity, quality, duration, etc. Consideration will also be given to the strength brought to the team by critical consultants/ subcontractors including how they were or will be selected and the success the team has had in the past in similar projects. The Selection Committee will also evaluate how the members of the Design/Build Team will work together to achieve project objectives. This will include any experience the team members have in working together.
- E. Project Management Approach. **9 POINTS**. Based on the information provided in the Final Management Plan and information presented in the interview, the selection team will evaluate how each team plans to design and construct the project in the location and time frames presented. The Selection Committee will also evaluate the degree to which risks to the success of the project have been identified and a reasonable solution has been presented. This will include how the Team proposes to keep the site safe and minimize disruption while moving material and people into and out of the site.
- F. Cost. **24 POINTS**. The team's proposal will be considered with all other criteria to determine the ranking of the firm. This may include consideration of any cost and scope adjustment proposals.

TOTAL POSSIBLE POINTS: 100 POINTS.

**Division of Facilities Construction and Management****PROJECT SCHEDULE**

PROJECT NAME: HAVEN J. AND BONNIE RAE BARLOW TECHNOLOGY/ MANUFACTURING BUILDING – DAVIS ATC CAMPUS UTAH COLLEGE OF APPLIED TECHNOLOGY – KAYSVILLE, UTAH				
DFCM PROJECT NO. 07036220		DESIGN/BUILD STAGE II		
Event	Day	Date	Time	Place
Request for Proposals Available	Monday	August 6, 2007	4:00 PM	DFCM 4110 State Office Bldg SLC, UT and the DFCM web site*
Mandatory Pre-Proposal Site Meeting	Thursday	August 16, 2007	1:30 PM	Board Room Davis ATC Campus 550 East 300 South Kaysville, UT
Visits with DFCM-Users	To be Scheduled at the Mandatory Pre-Proposal Meeting			
Last Day to Submit Questions	Wednesday	August 22, 2007	12:00 NOON	Lyle Knudsen – DFCM E-mail lknudsen@utah.gov Fax (801)-538-3267
Addendum Issued (exception for bid delay)	Friday	August 24, 2007	2:00 PM	DFCM web site *
Cost Proposals, Designs, Statements of Qualifications and Management Plans Due	Monday	September 10, 2007	12:00 NOON	DFCM 4110 State Office Bldg SLC, UT
Subcontractor List Due	Tuesday	September 11, 2007	12:00 NOON	DFCM 4110 State Office Bldg SLC, UT Fax (801)-538-3677
Interviews	Wednesday	September 19, 2007	9:00 AM	DFCM 4110 State Office Bldg SLC, UT
Announcement	Thursday	September 20, 2007	4:00 PM	
Substantial Completion Date	Monday	February 2, 2009		

* DFCM's web site address is <http://dfcm.utah.gov>.

**Division of Facilities Construction and Management****COST PROPOSAL FORM**

NAME OF PROPOSER _____ DATE _____

To the Division of Facilities Construction and Management
4110 State Office Building
Salt Lake City, Utah 84114

The undersigned, responsive to the "Notice to Design/Build Teams" and in accordance with the "Request for Proposals" for the **HAVEN J. AND BONNIE RAE BARLOW TECHNOLOGY/ MANUFACTURING BUILDING – DAVIS ATC CAMPUS - UTAH COLLEGE OF APPLIED TECHNOLOGY – KAYSVILLE, UTAH - DFCM PROJECT NO. 07036220** and having examined the Contract Documents and the site of the proposed Work and being familiar with all of the conditions surrounding the construction of the proposed Project, including the availability of labor, hereby proposes to furnish all labor, materials and supplies as required for the Work in accordance with the Contract Documents as specified and within the time set forth and at the price stated below. This price is to cover all expenses incurred in performing the Work required under the Contract Documents of which this bid is a part:

I/We acknowledge receipt of the following Addenda: _____

For all work shown on the Drawings and described in the Specifications and Contract Documents, I/we agree to perform for the sum of:

_____ DOLLARS (\$_____) (In case of discrepancy, written amount shall govern)

I/We guarantee that the Work will be Substantially Complete by **February 2, 2009**, should I/we be the successful proposer, and agree to pay liquidated damages in the amount of **\$1,000.00** per day for each day after expiration of the Contract Time as stated in Section 4.2 of the Design/Build Agreement.

This bid shall be good for 45 days after bid opening.

Enclosed is a 5% bid bond, as required, in the sum of _____

The undersigned Contractor's License Number for Utah is _____.

PROPOSAL FORM
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Upon receipt of notice of award of this bid, the undersigned agrees to execute the contract within ten (10) days, unless a shorter time is specified in the Contract Documents, and deliver acceptable Performance and Payment bonds in the prescribed form in the amount of 100% of the Contract Sum for faithful performance of the contract. The Bid Bond attached, in the amount not less than five percent (5%) of the above bid sum, shall become the property of the Division of Facilities Construction and Management as liquidated damages for delay and additional expense caused thereby in the event that the contract is not executed and/or acceptable 100% Performance and Payment bonds are not delivered within the time set forth.

Type of Organization:

(Corporation, Partnership, Individual, etc.)

Any request and information related to Utah Preference Laws:

Respectfully submitted,

Name of Proposer

ADDRESS:

Authorized Signature

BID BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ hereinafter referred to as the "Principal," and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ and authorized to transact business in this State and U. S. Department of the Treasury Listed, (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the STATE OF UTAH, hereinafter referred to as the "Obligee," in the amount of \$ _____ (5% of the accompanying bid), being the sum of this Bond to which payment the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that whereas the Principal has submitted to Obligee the accompanying bid incorporated by reference herein, dated as shown, to enter into a contract in writing for the _____ Project.

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if the said principal does not execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the principal, then the sum of the amount stated above will be forfeited to the State of Utah as liquidated damages and not as a penalty; if the said principal shall execute a contract and give bond to be approved by the Obligee for the faithful performance thereof within ten (10) days after being notified in writing of such contract to the Principal, then this obligation shall be null and void. It is expressly understood and agreed that the liability of the Surety for any and all defaults of the Principal hereunder shall be the full penal sum of this Bond. The Surety, for value received, hereby stipulates and agrees that obligations of the Surety under this Bond shall be for a term of sixty (60) days from actual date of the bid opening.

PROVIDED, HOWEVER, that this Bond is executed pursuant to provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their several seals on the date indicated below, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

DATED this _____ day of _____, 20_____.

Principal's name and address (if other than a corporation):

By: _____

Title: _____

Principal's name and address (if a corporation):

By: _____

Title: _____
(Affix Corporate Seal)

Surety's name and address:

By: _____
Attorney-in-Fact (Affix Corporate Seal)

STATE OF _____)
COUNTY OF _____) ss.

On this ____ day of _____, 20_____, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20_____.

My Commission Expires: _____

Resides at: _____

Agency: _____
Agent: _____
Address: _____
Phone: _____

NOTARY PUBLIC

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General



INSTRUCTIONS AND SUBCONTRACTORS LIST FORM (VBS)

All proposers that desire to be considered are required to submit a list of **ALL** first-tier subcontractors, including the subcontractor's name, bid amount and other information required by these Contract Documents, on the following basis:

PROJECTS UNDER \$500,000 - ALL SUBS \$20,000 OR OVER MUST BE LISTED
PROJECTS \$500,000 OR MORE - ALL SUBS \$35,000 OR OVER MUST BE LISTED

- The DFCM Director may not consider any proposal submitted by a proposer if the proposer fails to submit a subcontractor list meeting the requirements of State law.
- List subcontractors for base bid as well as the impact on the list that the selection of any alternate may have.
- Proposer may not list more than one subcontractor to perform the same work.
- Proposer must list "Self" if performing work itself.

LICENSURE:

The subcontractor's name, the type of work, the subcontractor's bid amount, and the subcontractor's license number as issued by DOPL, if such license is required under Utah Law, shall be listed. Proposer shall certify that all subcontractors, required to be licensed, are licensed as required by State law. A subcontractor includes a trade contractor or specialty contractor and does not include suppliers who provide only materials, equipment, or supplies to a contractor or subcontractor.

PROPOSER LISTING 'SELF' AS PERFORMING THE WORK:

Any proposer that is properly licensed for the particular work and intends to perform that work itself in lieu of a subcontractor that would otherwise be required to be on the subcontractor list, must insert the term 'Self' for that category on the subcontractor list form. Any listing of 'Self' on the sublist form shall also include the amount allocated for that work.

'SPECIAL EXCEPTION':

A proposer may list 'Special Exception' in place of a subcontractor when the proposer intends to obtain a subcontractor to perform the work at a later date because the proposer was unable to obtain a qualified or reasonable proposal under the provisions of U.C.A. Section 63A-5-208(4). The proposer shall insert the term 'Special Exception' for that category of work, and shall provide documentation with the subcontractor list describing the proposer's efforts to obtain a bid of a qualified subcontractor at a reasonable cost and why the proposer was unable to obtain a qualified subcontractor bid. The Director must find that the proposer complied in good faith with State law requirements for any 'Special Exception' designation, in order for the proposal to be considered. If awarded the contract, the Director shall supervise the proposer's efforts to obtain a qualified subcontractor bid. The amount of the awarded contract may not be adjusted to reflect the actual amount of the subcontractor's bid. Any listing of 'Special Exception' on the sublist form shall also include amount allocated for that work.

INSTRUCTIONS AND SUBCONTRACTORS LIST FORM
Page No. 2

GROUND FOR DISQUALIFICATION:

The Director may not consider any proposal submitted by a proposer if the proposer fails to submit a subcontractor list meeting the requirements of State law. Owner may withhold awarding the contract to a particular proposer if one or more of the proposed subcontractors are considered by the Owner to be unqualified to do the Work or for such other reason in the best interest of the State of Utah. Notwithstanding any other provision in these instructions, if there is a good faith error on the sublist form, at the sole discretion of Owner, the Owner may provide notice to the proposer and the proposer shall have 24 hours to submit the correction to the Owner. If such correction is submitted timely, then the sublist requirements shall be considered met.

CHANGES OF SUBCONTRACTORS SPECIFICALLY IDENTIFIED ON SUBLIST FORM:

Subsequent to submission of the subcontractors list, the contractor may change its listed subcontractors only after receiving written permission from the Director based on complying with all of the following criteria.

- (1) The contractor has established in writing that the change is in the best interest of the State and that the contractor establishes an appropriate reason for the change, which may include, but not is not limited to, the following reasons: the original subcontractor has failed to perform, or is not qualified or capable of performing, and/or the subcontractor has requested in writing to be released.
- (2) The circumstances related to the request for the change do not indicate any bad faith in the original listing of the subcontractors.
- (3) Any requirement set forth by the Director to ensure that the process used to select a new subcontractor does not give rise to bid shopping.
- (4) Any increase in the cost of the subject subcontractor work is borne by the contractor.
- (5) Any decrease in the cost of the subject subcontractor work shall result in a deductive change order being issued for the contract for such decreased amount.
- (6) The Director will give substantial weight to whether the subcontractor has consented in writing to being removed unless the contractor establishes that the subcontractor is not qualified for the work.

EXAMPLE:

Example of a list where there are only four subcontractors

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #
ELECTRICAL	ABCD Electric Inc.	\$350,000.00	123456789000
LANDSCAPING	"Self"	300,000.00	123456789000
CONCRETE (ALTERNATE #1)	XYZ Concrete Inc	298,000.00	987654321000
MECHANICAL	"Special Exception" (attach documentation)	Fixed at: 350,000.00	(TO BE PROVIDED AFTER OBTAINING SUBCONTRACTOR)

**SUBCONTRACTOR BID AMOUNTS CONTAINED IN THIS SUBCONTRACTOR LIST
SHALL NOT BE DISCLOSED UNTIL THE CONTRACT HAS BEEN AWARDED.**

**Division of Facilities Construction and Management****SUBCONTRACTORS LIST****PROJECT TITLE:** _____**Caution:** You must read and comply fully with instructions.

TYPE OF WORK	SUBCONTRACTOR, "SELF" OR "SPECIAL EXCEPTION"	SUBCONTRACTOR BID AMOUNT	CONT. LICENSE #

We certify that:

1. This list includes all subcontractors as required by the instructions, including those related to the base bid as well as any alternates.
2. We have listed "Self" or "Special Exception" in accordance with the instructions.
3. All subcontractors are appropriately licensed as required by State law.

FIRM: _____

DATE: _____

SIGNED BY: _____

NOTICE: FAILURE TO SUBMIT THIS FORM, PROPERLY COMPLETED AND SIGNED, AS REQUIRED IN THESE CONTRACT DOCUMENTS, SHALL BE GROUNDS FOR DFCMS REFUSAL TO ENTER INTO A WRITTEN CONTRACT WITH PROPOSER. ACTION MAY BE TAKEN AGAINST PROPOSERS BID BOND AS DEEMED APPROPRIATE BY DFCM. ATTACH A SECOND PAGE IF NECESSARY.

DFCM AND DESIGN/BUILD TEAM AGREEMENT

THIS AGREEMENT made and entered into this ____ day of ____, 20__, by and between the DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT, hereinafter referred to as the "DFCM", and **(FILL IN DESIGN/BUILD FIRM)** _____, a corporation authorized to do business in the State of Utah and consisting of a legally recognized business entity in the State of Utah and general contracting/ construction management and architectural/engineering components, which are to be performed by **(FILL IN DESIGN/BUILD FIRM)** _____, or entities under contract with **(FILL IN DESIGN/BUILD FIRM)** _____, as appropriate. **(FILL IN DESIGN/ BUILD FIRM)** _____, shall hereinafter be referred to as "DESIGN/BUILD TEAM".

WITNESSETH: WHEREAS, DFCM intends to have Work performed at

WHEREAS, DESIGN/BUILD TEAM agrees to perform the Work for the sum stated herein.

NOW, THEREFORE, DFCM and DESIGN/BUILD TEAM for the consideration provided in this Agreement, agree as follows:

INTRODUCTION:

This Agreement is between DFCM and DESIGN/BUILD TEAM, consisting of the prime general contractor who shall also responsibly represent it's A/E's, architect's, engineer's, suppliers, consultants, subconsultants and subcontractors at any tier. There are designer and general contractor responsibilities identified in this Agreement. There are important documents incorporated by reference. While the DESIGN/BUILD TEAM maintains liability for all design and general contractor functions, the specific functions referred to in this Agreement as well as the documents incorporated by reference, shall be performed by the respective personnel of the DESIGN/ BUILD TEAM that are qualified architects/engineers and general contractors.

The identity of the leaders of the specific functions of the DESIGN/BUILD TEAM are attached to this Agreement, entitled Exhibit "A." and made a part of this Agreement. Said leadership shall not be changed or substituted without written approval of the DFCM.

ARTICLE 1. DOCUMENTS INCORPORATED BY REFERENCE AND GENERAL PROVISIONS

1.1 DOCUMENTS INCORPORATED BY REFERENCE:

- 1.1.1 **Request for Proposals and General Conditions.** The DESIGN/ BUILD TEAM and DFCM shall be bound by their respective obligations, duties and rights as referred to in the Request for Proposals identified as

"Announcement of Design/Build Competition for the Design and Construction of the (**FILL IN TITLE OF RFP DOCUMENT**) _____, herein after identified as "Announcement of Design/Build Competition" and dated _____, inclusive of all addenda, as well as the DFCM General Conditions dated May 25, 2005, and on file with the Division of Facilities Construction and Management and by this reference incorporated herein. The Cost Proposal Form is hereby attached and made part of this agreement and is entitled Exhibit "B". It is intended that this DESIGN/BUILD TEAM's Agreement not reiterate all the applicable provisions of said Request for Proposals and the General Conditions and the fact that some provisions are reiterated herein does not lessen the importance of the provisions that are not so reiterated. Unless the context provides otherwise, all the definitions and interpretations of provisions of this DESIGN/BUILD TEAM's Agreement shall be as stated in said Announcement of Design Build Competition and the General Conditions. In case of conflict between the provisions of this DESIGN/BUILD TEAM's Agreement, the Announcement of Design/Build and the General Conditions, the following shall indicate which provision controls:

(1) This Agreement shall control over conflicting provisions in the Announcement of Design/Build Competition and/or General Conditions.

(2) The Announcement of Design/Build Competition shall control over conflicting provisions in the General Conditions.

Said General Conditions shall be construed in such a manner as that any reference to a right, responsibility, or duty of the General Contractor (Contractor) referred to in the General Conditions shall be deemed to refer to the DESIGN/BUILD TEAM. Any reference to A/E in the General Conditions shall be deemed to refer to the DESIGN/BUILD TEAM Architect/Engineer as applicable, and shall also be bound by the provisions in the General Conditions that refer to the duties and responsibilities of the A/E in the General Conditions. Unless otherwise specified by this Agreement, the definitions in the General Conditions shall apply to this Agreement.

1.1.2 The Project Defined. The Project is the total design and construction for which the DESIGN/BUILD TEAM is responsible, including all professional design services and all labor, materials and equipment used or incorporated in such design and construction for the project referenced by the Announcement of Design/Build Competition in Paragraph 1.1.1 above.

1.1.3 The Work Defined. The Work comprises the completed construction designed under the Project and includes labor necessary to produce such construction, and materials and equipment incorporated or to be incorporated in such construction.

1.2 EXECUTION, CORRELATION, CONTRACTUAL RELATIONSHIP AND INTENT

1.2.1 This Agreement shall be signed in not less than duplicate by the DFCM and DESIGN/ BUILD TEAM.

1.2.2 Nothing contained in this Agreement and the Contract Documents shall create a professional obligation or contractual relationship between the DFCM and any third party, including subcontractors, A/E's, consultants and suppliers at any tier of the DESIGN/BUILD TEAM. Notwithstanding this, it is understood and agreed that the DFCM is the intended third party beneficiary of all contracts for design or engineering services, all subcontracts, purchase orders and other agreements between the DESIGN/BUILD TEAM and third parties.

The DESIGN/BUILD TEAM shall incorporate the obligations of this Agreement into its respective subcontracts, supply agreements and purchase orders. The DESIGN/BUILD TEAM shall also be responsible to the DFCM for wrongful or negligent acts, errors or omissions of its A/E, consultants, subcontractors, suppliers, agents and employees or those in privity with the DESIGN/BUILD TEAM, at any tier.

1.3 CONTRACT DOCUMENTS. The Contract Documents consist of the General Conditions adopted by the Utah State Building Board on May 25, 2005; the DFCM Design Manual dated May 25, 2005 and on file with the office of DFCM; this Agreement; the Conditions of the Contract (General and Supplementary Conditions); and all competition documents provided by DFCM to DESIGN/BUILD TEAM and all competition documents provided by DESIGN/BUILD TEAM to DFCM, which are identified in a list entitled Exhibit "C", hereby attached and made part of this Agreement. Clarifications to said proposal documents are hereby identified in Exhibit "D", which is hereby attached and made part of this Agreement. All such Contract Documents referred to in this Paragraph 1.3 are hereby incorporated by reference herein. Any reference in this Agreement to certain provisions of the Contract Documents shall in no way be construed as to lessen the importance or applicability of any other provisions of the Contract Documents.

1.4 CONTRACT DOCUMENTS COMPLIANCE, TERMS, INDEPENDENT CONTRACTOR. The Work to be performed shall be in accordance with all of the Contract Documents. All terms used in this Agreement shall be as defined in the Contract Documents, and in particular, the General Conditions, except as otherwise provided in this Agreement. The DESIGN/ BUILD TEAM Agrees to furnish labor, materials and equipment to complete the Work as required in the Contract Documents which are hereby incorporated by reference. It is understood and agreed by the parties hereto that all Work shall be performed as required in the Contract Documents and shall be subject to inspection and approval of DFCM or its authorized representative. The relationship of the DESIGN/BUILD TEAM to the DFCM hereunder is that of an independent contractor.

ARTICLE 2. **DESIGN/BUILD TEAM**

2.1 RESPONSIBILITY ALLOCATION. The components of the Design Team shall have primary responsibilities as follows:

2.1.1 Design services shall be performed by the A/E of the DESIGN/BUILD TEAM as well as the appropriate consultants (engineers, etc) selected and paid by the DESIGN/BUILD TEAM and acting in the interest of the DESIGN/BUILD TEAM. As part of the proposal of DESIGN/ BUILD TEAM, **(FILL IN NAME OF DESIGN FIRM)** _____ has been selected as the A/E for the Project and is, or shall be promptly, under contract with the DESIGN/BUILD TEAM. DESIGN/BUILD TEAM shall notify DFCM of any substantial change in the composition of the A/E assigned to the Project, including but not limited to any major changes of staffing or assignments of architects to the Project. Any substantial change in the composition of the A/E must be approved by DFCM in writing. The identity of the leader of the specific functions of **(FILL IN NAME OF DESIGN FIRM)** _____ - is **(FILL IN NAME OF DESIGN FIRM REPRESENTATIVE)** _____, principal in charge of coordination of all design services. Said leadership shall not be changed or substituted without written approval of the DFCM.

2.1.2 Construction shall be performed in accordance with this Agreement and the Contract Documents by the qualified general contractor component of the DESIGN/BUILD TEAM as well as the appropriate subcontractors and suppliers at any tier in privity with the DESIGN/BUILD TEAM. Design Work shall be performed in accordance with this Agreement and the Contract Documents by the A/E component of the DESIGN/BUILD TEAM as well as the appropriate consultants at any tier in privity with the A/E.

2.1.3 The DESIGN/BUILD TEAM shall be responsible to the DFCM for wrongful or negligent acts, errors or omissions of the DESIGN/BUILD TEAM's employees and parties in privity of contract with the DESIGN/BUILD TEAM, at any tier, to perform any portion of the Work, including their agents and employees.

2.2 BASIC DESIGN SERVICES. The DESIGN/BUILD TEAM's Basic Design Services consist of those described below and any other services identified in this DESIGN/BUILD TEAM Agreement as part of Basic Services related to design, including normal structural, mechanical, electrical, and architectural as well as other consulting services reasonably necessary to fulfill the design duties and responsibilities under this Agreement and the Contract Documents. The DESIGN/BUILD TEAM shall prepare and promptly distribute minutes of all meetings. Said minutes shall not be considered official minutes until approved by the DFCM.

2.3 DESIGN DEVELOPMENT PHASE.

2.3.1 **Design Development Documents.** Based on the approved Design/Build Proposal, written authorization to proceed to Design Development signed by the DFCM, and any adjustments authorized by the DFCM in the program, or scope of work, schedule or construction budget, the DESIGN/BUILD TEAM shall prepare, for approval by the DFCM, Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, materials and such other elements as may be appropriate. The Design Development Documents shall include the items listed in the Design Development Phase Checklist of the DFCM Design Manual incorporated by reference into this Agreement.

2.3.2 **Design Revisions.** The DFCM reserves the right to request minor design revisions and the DESIGN/BUILD TEAM shall promptly perform such revisions with no increase in cost beyond the Guaranteed Fixed Costs for all the Work of this Project.

2.4 CONSTRUCTION DOCUMENTS PHASE.

2.4.1 **Construction Documents.** Based on the approved Design Development Documents, and written authorization to proceed to the Construction Documents Phase signed by the DFCM, and any further adjustments in the scope or quality of the Project or in the construction budget authorized by the DFCM, the DESIGN/BUILD TEAM shall prepare, for approval by the DFCM, Construction Documents consisting of Drawings and Specifications setting forth in detail the requirements for the construction of the Project. The Construction Documents shall include the items listed in the Contract Document Phase Checklist of the DFCM Design Manual incorporated by reference into this Agreement.

2.4.2 Market Changes. It is understood that the DESIGN/BUILD TEAM assumes the risk and cost of market changes with respect to the DESIGN/BUILD TEAM's scope of work. In the event any supplier under a Purchase Agreement with the State of Utah fails to perform according to the terms of his agreement, the DESIGN/BUILD TEAM will be entitled to an equitable adjustment of the contract price and time. The DESIGN/BUILD TEAM will use its best efforts in managing those suppliers to maintain the project schedule.

2.4.3 Assist With Filing For Governmental Approval. When requested by the DFCM, the DESIGN/BUILD TEAM shall assist the DFCM in all reasonable requests in connection with the DFCM's responsibility for filing documents required for approval of governmental authorities having jurisdiction over the Project.

2.5 BIDDING OR NEGOTIATION PHASE.

2.5.1 Duties; In General. After receipt of the written authorization to proceed to the Bidding or Negotiation Phase by DFCM, the DESIGN/BUILD TEAM shall obtain bids or negotiate proposals and award contracts to subcontractors, subconsultants and suppliers which are consistent with the Design/Build Agreement. The term "bid" in the Agreement is also meant to mean "proposal" where the DESIGN/BUILD TEAM is using a request for proposal procurement process.

(1) The DESIGN/BUILD TEAM shall promptly supply ten (10) complete sets of Final Construction Documents to DFCM.

(2) **Specified Subcontractors:** The specifically cited subcontractors, along with their license number (if required) and estimated cost, have been listed as a submission with the DESIGN/ BUILD TEAM cost proposal. Any substantial variation from the original estimate, submitted on **(FILL IN DATE PROPOSAL WAS SUBMITTED)** _____ as part of the Cost Proposal, shall be accompanied by a written explanation from the Contractor justifying the variation and describing how the variation meets or exceeds the "value" to the DFCM on the project.

(3) **Non-Specified Subcontractors:** The non-specified subcontractor's scope of work and estimated costs shall be listed as a submission with the DESIGN/BUILD TEAM cost proposal. Within 24 hours after the Contractor "opens" the non-specified subcontractors bid and if the bid is from a subcontractor that would otherwise be required to be part of a sublist under UCA 63-5a-208 if the procurement was performed directly by DFCM in bidding process, the DESIGN/BUILD TEAM shall submit name of the subcontractor along with their license number (if required) and estimated cost to DFCM. During the competitive bid process by the DESIGN/BUILD TEAM for these subcontractors, DFCM shall have a representative at the bid opening and subcontractor's selection.

(4) The DESIGN/BUILD TEAM shall at all reasonable times be available personally, or have available, a responsible member of his or her staff to make such interpretations of the Contract Documents as are necessary to facilitate completion of the construction contract by the DESIGN/BUILD TEAM's subcontractors and suppliers.

(5) If subcontractor's are selected through a proposal process and the DESIGN/ BUILD TEAM fails to comply with the sublist requirements of UCA 63-5a-208 for bids made applicable in this Agreement to proposals, the DESIGN/BUILD TEAM shall have 24 hours to cure such failure after receiving written notice from DFCM.

2.6 CONSTRUCTION PHASE-ADMINISTRATION OF THE CONSTRUCTION.

2.6.1 Advise And Consult. The DESIGN/BUILD TEAM shall advise and consult with the DFCM during the Construction Phase. No one shall be entitled to rely upon any representation by the DESIGN/BUILD TEAM unless it is in writing and signed by the DESIGN/BUILD TEAM Project Manager or a principal of the DESIGN/BUILD TEAM.

2.6.2 Representations by Third Parties, and Officials, Other Than DFCM. DESIGN/ BUILD TEAM may not rely on any representations of other state agencies, officials or any third parties unless specifically approved in writing by DFCM.

2.6.3 Record Copy at Site. The DESIGN/BUILD TEAM shall maintain in good order at the site one record copy of the drawings, specifications, product data, samples, shop drawings, Change Orders and other Modifications, marked currently to record changes made during construction. At the conclusion of the Construction Phase the DESIGN/BUILD TEAM shall prepare and furnish to the DFCM a complete set of Record Drawings (corrected original tracings or re-plotted CADD drawings), one set of mylar reproducible Record Drawings and two (2) sets of Specifications depicting the Project.

CADD Criteria. The “DFCM CADD Criteria” which is a part of the Design Manual shall be reviewed by the A/E and shall be used to define and/or supplement any terms or responsibilities under this Agreement. The DFCM CADD Criteria in the Design Manual in case of conflict, shall supercede any provision of this Agreement.

2.7 ADDITIONAL SERVICES: IN GENERAL.

2.7.1 Written Authorization Required. The DESIGN/BUILD TEAM shall perform all duties and responsibilities required by this Agreement and the Contract Documents for the Guaranteed Fixed Price. If the DESIGN/BUILD TEAM reasonably believes that a particular duty or responsibility is beyond that identified by this Agreement or the Contract Documents, then the DESIGN/ BUILD TEAM shall not be entitled to any amount which would result in an increase in the Guaranteed Fixed Price unless, prior to performing the subject duty or responsibility, the DESIGN/BUILD TEAM has requested in writing a Modification to this Agreement and the Modification has been approved, in writing, by DFCM. The provisions of the General Conditions regarding Modifications, requests for additional time and additional monies shall apply to this Agreement.

2.7.2 When Not Paid by DFCM. Notwithstanding anything to the contrary in this Agreement, DFCM shall not be responsible to pay and the DESIGN/BUILD TEAM shall not be entitled to receive, compensation for any Contingent Additional Services if such services were required due to the fault of the DESIGN/BUILD TEAM or the DESIGN/BUILD TEAM's failure to perform in accordance with the terms of this Agreement. Notwithstanding this, there shall be no right to payment for additional services or contingent additional services if such services are not approved in advance by DFCM in writing.

2.8 STANDARD FOR PERFORMANCE.

2.8.1 Due Care and Diligence; In General. DESIGN/BUILD TEAM shall exercise the degree of skill and diligence as exercised by members of the DESIGN BUILD TEAM'S profession having substantial experience on projects similar in type, magnitude and complexity to the Project that is the

subject of this Agreement and all of the services under this Agreement shall be performed as expeditiously as is consistent with said standards. The DESIGN/BUILD TEAM shall be liable to the Owner for claims, liabilities, additional burdens, penalties, damages or third party claims, to the extent caused by wrongful or negligent acts, errors or omissions that do not meet this standard of care.

2.8.2 Due Care and Diligence; Discovering and Reporting Defects and Deficiencies. The DESIGN/BUILD TEAM shall exercise due care and diligence in discovering and promptly reporting to the DFCM any defects or deficiencies in the Work. Any defective Designs or Specifications furnished by the DESIGN/BUILD TEAM shall be promptly corrected by the DESIGN/ BUILD TEAM at no cost to the DFCM, and the DESIGN/BUILD TEAM shall promptly reimburse the DFCM for all damages, if any, resulting from the use of such defective Designs or Specifications. The DFCM's approval, acceptance, use of or payment for all or any part of the DESIGN/ BUILD TEAM'S services hereunder or of the Project itself shall in no way alter the DESIGN/BUILD TEAM'S obligations or the DFCM's rights hereunder.

2.9 TESTS, INSPECTIONS AND REPORTS.

2.9.1 DFCM shall be responsible for all structural (soils and concrete), mechanical, electrical testing required by law or code. It shall be DESIGN/BUILD TEAM's responsibility to determine when, which, and to the extent that such tests, inspections and reports are required by the Contract Documents. The DFCM may review and comment, when appropriate, on the accuracy of the tests and information furnished by the DESIGN/BUILD TEAM pursuant to this Paragraph 2.9.1. The DFCM will be monitoring tests and inspections for the subject work. The DESIGN/BUILD TEAM shall coordinate all test and inspections with the DFCM. All other tests or inspections required by contract documents shall be furnished at the DESIGN/BUILD TEAM's expense.

2.9.2 The DFCM shall be responsible for all chemical, air and water pollution tests, tests for hazardous material, and other laboratory and environmental tests, inspections and reports, including those required by law or the Contract Documents. It shall be DFCM's responsibility to determine when, which, and to the extent that such tests, inspections and reports are required by the Contract Documents. The DFCM may review and comment, when appropriate, on the accuracy of the tests and information furnished by the DESIGN/BUILD TEAM pursuant to this Paragraph 2.9.2. The services, information, surveys and reports required by this Paragraph 2.9.2 shall be furnished at the DFCM's expense. The DFCM will be monitoring tests and inspections for the subject work. The DESIGN/BUILD TEAM shall coordinate all test and inspections with the DFCM.

ARTICLE 3. **DFCM'S RESPONSIBILITIES**

3.1 INFORMATION. The DFCM shall provide full information regarding requirements for the Project, including a program or scope of work which shall set forth the DFCM's objectives, schedule, constraints, and criteria, including space requirements and relationships, flexibility, expandability, special equipment, systems and site requirements.

3.2 RESPONSE TO DESIGN/BUILD TEAM. The DFCM shall give reasonable consideration to all sketches, estimates, working drawings, specifications, proposals, and other documents presented by the

DESIGN/BUILD TEAM; and to inform the DESIGN/BUILD TEAM of the decisions, in writing, within a fourteen (14) day time period.

3.3 DFCM PROJECT MANAGER. The DFCM shall designate a DFCM Project Manager authorized to act on the DFCM's behalf with respect to the Project. The DFCM or such Project Manager shall render decisions within a fourteen (14) day time period pertaining to documents submitted by the DESIGN/BUILD TEAM in order to avoid unreasonable delay in the orderly and sequential progress of the DESIGN/BUILD TEAM's services and Work. The DFCM may appoint an on-site project representative to observe the Work and to have such other responsibilities as the DFCM deems necessary to facilitate this Agreement.

3.4 COMMUNICATIONS. DFCM shall communicate with subcontractors at any tier and material suppliers of the DESIGN/BUILD TEAM only through the DESIGN/BUILD TEAM. DESIGN/BUILD TEAM shall communicate to DFCM directly and not through the User or any other governmental agency. DESIGN/BUILD TEAM shall not rely on any comments or writings of User without express consent in writing of DFCM.

ARTICLE 4. **TIME**

4.1 DESIGN FUNCTION SCHEDULE. Time limits provided by the RFP shall not be exceeded by the DESIGN/BUILD TEAM or DFCM. Any extensions of time from the schedule shall be void and of no force and effect until such adjustments are agreed to in writing by the DFCM and DESIGN/BUILD TEAM.

4.2 CONSTRUCTION FUNCTION SCHEDULE. TIME OF COMPLETION OF CONSTRUCTION WORK AND DELAY REMEDY. The Construction Work shall be Substantially Complete within (FILL IN COMPLETION TIME) _____ (____) calendar days after the date of the Notice to Proceed. DESIGN/BUILD TEAM agrees to pay liquidated damages in the amount of \$_____ per day for each day after expiration of the Contract Time until the DESIGN/BUILD TEAM achieves Substantial Completion in accordance with the Contract Documents, if the DESIGN/BUILD TEAM's delay makes the damages applicable. The provision for liquidated damages is: (a) to compensate the DFCM for delay only; (b) is provided for herein because actual damages can not be readily ascertained at the time of execution of this Design/Build Agreement; (c) is not a penalty; and (d) shall not prevent the DFCM from maintaining Claims for other non-delay damages, such as costs to complete or remedy defective Work.

No PRE, Claim or action shall be maintained by the DESIGN/BUILD TEAM or Subcontractor or material supplier of DESIGN/BUILD TEAM at any tier, against the DFCM for damages or other claims due to losses attributable to hindrances or delays from any cause whatsoever, including acts and omissions of the DFCM or its officers, employees or agents, except as expressly provided in the General Conditions, including procedural, timing and substantive provisions of the General Conditions.

ARTICLE 5. **PAYMENTS**

5.1 COMPENSATION. The DFCM shall compensate the DESIGN/BUILD TEAM for work properly performed in accordance with the Contract Documents after the DFCM's receipt and approval of the DESIGN/BUILD TEAM's detailed monthly statement and any lien waivers or releases previously requested by DFCM.

5.1.1 Guaranteed Fixed Contract Amount. The DFCM agrees to pay and the DESIGN/BUILD TEAM agrees to accept in full performance of the design work and the construction Work under this DESIGN/BUILD TEAM's Agreement, not more than the sum of **(FILL IN CONTRACT AMOUNT)** _____ DOLLARS AND NO CENTS (\$_____.00) which sum is the proposal amount submitted on _____ and which sum shall be the guaranteed fixed contract amount. Payment to the DESIGN/BUILD TEAM will be made within thirty (30) calendar days of receipt of payment application by DFCM.

The DESIGN/BUILD TEAM shall provide DFCM within thirty (30) days of request by DFCM, a schedule of accounts and budgets for Work which will be used as a basis for applications for payment. The DFCM agrees to pay the DESIGN/BUILD TEAM for the construction Work and the design services from time to time as the Work progresses, but not more than once each month after the date of Notice to Proceed, and only upon Certificate of the A/E as approved by DFCM which approval may not be unreasonably withheld, for Work performed during the preceding calendar month, ninety-five percent (95%) of the value of the labor performed and ninety-five percent (95%) of the value of materials furnished in place or on the site. The DESIGN/BUILD TEAM agrees to furnish to the DFCM invoices for materials purchased and on the site but not installed, for which the DESIGN/BUILDER requests payment and agrees to safeguard and protect such equipment or materials and is responsible for the safekeeping thereof and if such be stolen, lost or destroyed, to replace same.

Such evidence of labor performed and materials furnished as the DFCM may reasonably require shall be supplied by the DESIGN/BUILD TEAM at the time of request for Certificate of Payment on account. Materials for which payment has been made cannot be removed from the job site without DFCM's written approval. Five percent (5%) of the earned amount shall be retained from each monthly payment. Additional retainage shall be imposed if, in the written opinion of the Director of the Division of Facilities Construction and Management, special circumstances or considerations justify the imposition of additional retainage in the interest of the State.

5.1.2 DESIGN/BUILD TEAM Expenses. The guaranteed fixed contract amount shall include all expenses of the DESIGN/BUILD TEAM, including travel, lodging, per diem and other costs associated with the performance of the duties and work under this Agreement.

5.2 DESIGN/BUILD TEAM'S ACCOUNTING RECORDS. All Accounting Records shall be available to the DFCM or the DFCM's authorized representative at mutually convenient times.

ARTICLE 6. **CHANGES IN THE WORK**

6.1 ADDITIONAL WORK. It is understood and agreed by the parties hereto that no money will be paid to the DESIGN/BUILD TEAM for additional labor or materials furnished unless a new contract in writing or a Modification hereof in accordance with the General Conditions and Contract Documents for such additional labor or materials has been executed. The DFCM specifically reserves the right to modify or amend this Agreement and the total sum due hereunder either by enlarging or restricting the scope of the Work.

Modifications shall be issued in accordance with the General Conditions. No action, conduct, omission, prior failure or course of dealing by the DFCM shall act to waive, modify, change, or alter this requirement. Written modifications are the exclusive method for effecting any change to the contract sum or contract time. The

DESIGN/BUILD TEAM understands and agrees that the contract sum and contract time cannot be changed by implication, oral agreements, actions, inactions, course of conduct or contractor initiated change order.

ARTICLE 7. INSURANCE, BONDS AND INDEMNIFICATION

7.1 IN GENERAL. To protect against liability, loss and/or expense arising in connection with the performance of services described under this DESIGN/BUILD TEAM's Agreement, the DESIGN/BUILD TEAM shall obtain and maintain in force during the entire period of this DESIGN/BUILD TEAM's Agreement, at its own expense, the following insurance from insurance companies authorized to do business in the State of Utah and rated "A" or better with a financial size category of Class X or larger. An exception to the above-stated rating and financial size category requirements is for the professional liability insurance referred to in 7.2.1(1) below, in which case the rating must be "B" or better with a financial size category of Class VIII or larger. All said ratings and financial size categories shall be as published by A.M. Best Company at the time this DESIGN/BUILD TEAM's Agreement is executed.

7.2 DESIGN/BUILD TEAM INSURANCE. Insurance for the general construction management and architectural components of the DESIGN/BUILD TEAM shall be provided as required below:

7.2.1 General Contractor's Insurance. In addition to the insurance required in Section 7.4 below, the DESIGN/BUILD TEAM shall meet all the insurance requirements for a General Contractors as required by the General Conditions.

7.3 GENERAL CONTRACTOR'S BONDS. In addition to the insurance required above, the bonds for the General Contractor functions under this Agreement shall be provided as required by the General Conditions. The 100% performance and payment bonds may exclude the amount attributable to design services as agreed to by DFCM. The performance and payment bonds must be in effect and provided to DFCM on the standard DFCM forms prior to the issuance of a notice to proceed for the actual construction work.

7.4 DESIGN INSURANCE. In addition to the insurance required above, the following insurance for the design services under this Agreement shall be provided:

7.4.1 DESIGN/BUILD TEAM Designer's Professional Liability Insurance. The DESIGN/ BUILD TEAM shall maintain a professional liability insurance policy on a claims made basis, annual aggregate policy limit based on the following chart, unless modified in an attachment to this Agreement.

Construction Budget	Minimum Liability Coverage
\$50,000,000 and above	\$2,000,000 per claim, \$4,000,000 aggregate
\$25,000,000 and above, but under \$50,000,000	\$2,000,000 per claim, \$2,000,000 aggregate
\$1,500,000 and above but under \$25,000,000	\$1,000,000 per claim, \$1,000,000 aggregate
Under \$1,500,000	\$ 500,000 per claim, \$ 500,000 aggregate

7.4.2 Valuable papers and Records Coverage and/or Electronic Data Processing (Data and Media) Coverage. The DESIGN/BUILD TEAM and all engineering consultants of the DESIGN/BUILD TEAM shall provide coverage for the physical loss of or destruction to their work product including drawings, specifications and electronic data and media.

7.5 ADDITIONAL COVERAGE. The DFCM reserves the right to require additional coverage from that stated hereinabove, at the DFCM's expense for the additional coverage portion only. DFCM also reserves the right to require project specific insurance, and if such right has been exercised it shall be indicated as an exhibit to this DESIGN/BUILD TEAM's Agreement. Unless project specific insurance is required by the DFCM, the coverage may be written under a practice policy with limits applicable to all projects undertaken by the firm but must be maintained in force for the discovery of claims for a period of three (3) years after the date final payment is made to the DESIGN/BUILD TEAM under this DESIGN/ BUILD TEAM's Agreement. All policies provided by the DESIGN/BUILD TEAM must contain a "retroactive" or "prior-acts" date which precedes the earlier of, the date of the DESIGN/BUILD TEAM's Agreement or the commencement of the DESIGN/BUILD TEAM's services. The DESIGN/BUILD TEAM's policy must also include a contractual liability endorsement applicable to the indemnity provision contained under this Article of this DESIGN/ BUILD TEAM's Agreement. Any review and approval by the DFCM does not relieve the DESIGN/BUILD TEAM of any responsibility of liability for an error, omission, submittal or work.

7.6 FURNISH EVIDENCE OF INSURANCE, CERTIFICATES, ADDITIONAL INSURED. The DESIGN/BUILD TEAM shall submit certificates in form and substance satisfactory to the DFCM as evidence of the insurance requirements of this Article. Such certificates shall provide the DFCM with thirty (30) days notice prior to the cancellation, material change or non-renewal of the applicable coverage, as evidenced by return receipt, certified mail, sent to DFCM. The DESIGN/BUILD TEAM shall notify DFCM within thirty (30) days of any claim(s) against the DESIGN/BUILD TEAM which singly or in the aggregate exceed 20% of the applicable required insured limits, and the DFCM may require the DESIGN/BUILD TEAM to reinstate the policy to provide full protection at the original limits.

The State of Utah shall be named as an insured party, as primary coverage and not contributing, on all the insurance policies required by this Article except the professional liability and workers' compensation policies. The DFCM reserves the right to request the DESIGN/BUILD TEAM to provide a loss report from their insurance carrier.

7.7 DFCM RECOURSE. The DESIGN/BUILD TEAM agrees to maintain the insurance described in this Article during the required term. If the DESIGN/BUILD TEAM fails to furnish and maintain said required insurance, the DFCM may purchase such insurance on behalf of the DESIGN/BUILD TEAM, and the DESIGN/BUILD TEAM shall pay the cost thereof to the DFCM upon demand and shall furnish to the DFCM any information needed to obtain such insurance.

7.8 INDEMNIFICATION.

7.8.1 **In General.** To the fullest extent permitted by law, the DESIGN/BUILD TEAM shall indemnify and hold harmless the State of Utah, its institutions, agencies, departments, divisions, authorities, and instrumentalities, boards, commissions, elected or appointed officers, employees, agents, authorized volunteers (hereinafter the above listing of entities and persons is referred to as "indemnities") from and against every kind and character of claims, damages, losses and expenses, including but not limited to attorneys' fees,

arising out of or resulting from any act or omission in the performance of the Work under this DESIGN/ BUILD TEAM's Agreement including the work of anyone directly or indirectly employed by the DESIGN/ BUILD TEAM, the DESIGN/BUILD TEAM's agent, consultant or independent contractor, or anyone for whose acts any of them may be liable, provided that any such claim, damage, loss or expense is caused in whole or in part by the negligent or intentional act or omission of the DESIGN/BUILD TEAM, anyone directly or indirectly employed by the DESIGN/BUILD TEAM, the agent, consultant or independent contractor of any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a part indemnified hereunder. The DESIGN/ BUILD TEAM shall defend all actions brought upon such matters to be indemnified hereunder and pay all costs and expenses incidental thereto, but the State of Utah shall have the right, at its option, to participate in the defense of any such action without relieving the DESIGN/BUILD TEAM of any obligation hereunder.

7.8.2 Not Reduce Current Rights. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party or person under this DESIGN/BUILD TEAM's Agreement.

7.8.3 Not Bound By Damage Limitations Under Certain Acts. In claims against any person or entity indemnified under this Paragraph 7.8 by an employee of the DESIGN/BUILD TEAM, anyone directly or indirectly employed by the DESIGN/BUILD TEAM, the agent, consultant or independent contractor of any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 7.8 shall not be limited by a limitation on the amount or type of damages, compensation or benefits payable by or for the DESIGN/BUILD TEAM or said employee, agent, consultant, independent contractor or anyone for whose acts any of them may be liable, under workers' or workmen's compensation acts, disability benefits acts or other employee benefit acts.

ARTICLE 8. **DISPUTE RESOLUTION**

8.1 DISPUTES. Any dispute, PRE or Claim between the parties shall be subject to the provisions of Article 7 of the General Conditions. DFCM reserves all rights to pursue its rights and remedies as provided in the General Conditions.

ARTICLE 9. **TERMINATION, SUSPENSION OR ABANDONMENT**

9.1 IN GENERAL. This Agreement may be terminated, suspended or abandoned in accordance with the General Conditions.

ARTICLE 10. **OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS**

10.1 IN GENERAL. All Drawings, Specifications, other Contract Documents, as well as studies and projects prepared by the DESIGN/BUILD TEAM under this Agreement, are and shall remain the property of the DFCM, and DFCM shall retain all common law, statutory and other reserved rights with respect thereto. All other provisions regarding the use, re-use and other provision regarding such items as stated in the General Conditions shall apply.

ARTICLE 11.
MISCELLANEOUS PROVISIONS

11.1 GOVERNING LAW AND VENUE. Unless otherwise provided, this DESIGN/BUILD TEAM's Agreement shall be governed by the laws of the State of Utah. Salt Lake County, State of Utah, shall be the venue of any legal proceeding regarding the terms or enforcement of this DESIGN/BUILD TEAM's Agreement.

11.2 WAIVER TO EXTENT OF RECOVERY OF INSURANCE MONIES. The DFCM and DESIGN/BUILD TEAM waive all rights against each other and against the DESIGN/BUILD TEAM's consultants, subcontractors, agents and employees of the other for damages, but only to the extent covered by the DFCM provided Builder's Risk Policy concerning damage to the Work during construction, except such rights as they may have to the proceeds of such insurance as set forth in the General Conditions. The DFCM and DESIGN/BUILD TEAM each shall require similar waivers from their contractors, subcontractors, consultants and agents at any tier.

11.3 BINDING AGREEMENT AND ASSIGNMENT PROVISIONS. The DFCM and DESIGN/ BUILD TEAM respectively, bind themselves, their successors, assigns and legal representatives to the other party to this DESIGN/BUILD TEAM's Agreement and to the partners, successors, assigns and legal representatives of such other party with respect to all covenants of this DESIGN/BUILD TEAM's Agreement. Neither the DFCM nor the DESIGN/BUILD TEAM shall assign its interest in this Agreement without the written consent of the other, except that the Contractor hereby consents to the assignment of the DFCM's interest herein as provided in this Article 11.

11.4 INTEGRATION AND AMENDMENT. This DESIGN/BUILD TEAM's Agreement represents the entire and integrated agreement between the DFCM and DESIGN/BUILD TEAM and supersedes all prior negotiations, representations or agreements, either written or oral. Except for Construction Change Directives issued under the General Conditions, this Agreement may be amended only by written instrument signed by both DFCM and DESIGN/BUILD TEAM.

11.5 THIRD PARTIES. Except for DFCM's third party beneficiary rights described in this Agreement, nothing contained in this Agreement shall create a contractual relationship with or a cause of action in favor of a third party against either the DFCM or DESIGN/BUILD TEAM.

11.6 HAZARDOUS MATERIALS. The responsibilities of the DFCM and the DESIGN/BUILD TEAM regarding Hazardous Materials shall be as specified in the General Conditions and the Contract Documents.

11.7 PROMOTION. The DESIGN/BUILD TEAM shall have the right to include accurate representations of the design of the Project, including photographs of the exterior and interior, among the DESIGN/BUILD TEAM's promotional and professional materials. The DESIGN/BUILD TEAM's materials shall not include the DFCM's or the State's confidential or proprietary information if the DFCM has previously advised the DESIGN/BUILD TEAM in writing of the specific information considered by the DFCM to be confidential or proprietary. The DFCM shall provide professional credit for the DESIGN/ BUILD TEAM on the construction sign and in the promotional materials for the Project. For purposes of this Paragraph 11.7, reference to the "DESIGN/BUILD TEAM" shall include the DESIGN/BUILD TEAM's consultants.

11.8 INDEPENDENT CONTRACTOR. The DESIGN/BUILD TEAM shall be considered an independent DESIGN/BUILD TEAM, and as such, shall have no authorization, express or implied, to bind the State of Utah or the DFCM to any agreement, settlement, liability or understanding whatsoever, nor to perform any acts as agent for the State of Utah or DFCM, except as specifically set forth in this DESIGN/BUILD TEAM's Agreement.

11.9 WRITTEN NOTICE. DFCM and DESIGN/BUILD TEAM shall be subject to the written notice provisions of the General Conditions.

11.10 DFCM/AGENCY REVIEW. DFCM or any other entity's (including agency user's of the State of Utah) plan reviews or any other type or nature of review shall in no way relieve the DESIGN/BUILD TEAM of design liability or contractual responsibility under this DESIGN/BUILD TEAM's Agreement. Any guidelines, specifications, drawings or plans provided by the DFCM or any other entity to the DESIGN/ BUILD TEAM shall not relieve the DESIGN/BUILD TEAM of design liability or contractual responsibility under this Agreement.

11.11 CONSULTANTS.

11.11.1 Not Use "Sales" or "Agent" A/E's or Consultants. The DESIGN/ BUILD TEAM agrees not to use "sales" or "agent" A/E's or consultants. Said A/E's or Consultants are not to benefit financially either directly or indirectly from the sale or use of any product on or in the Project.

11.11.2 A/E and Consultant Qualifications. All A/E and Consultants must be licensed in Utah for the professional practice used on the Project and be approved in writing, in advance, by the DFCM.

11.12 A/E, CONSULTANTS, SUBCONTRACTORS OF DESIGN/BUILD TEAM. Any A/E, subcontract, supplier, or consultants agreement that the DESIGN/BUILD TEAM may enter into in regard to the Project of this DESIGN/BUILD TEAM's Agreement, shall require conformance with the provisions of this DESIGN/ BUILD TEAM's Agreement, to the extent applicable.

11.13 WORK BY DFCM OR DFCM'S CONTRACTORS. The DFCM reserves the right to perform work related to, but not part of, the Project and to award separate contracts in connection with other work at the site. The DESIGN/BUILD TEAM shall cooperate with the DFCM to afford the DFCM's other contractors a reasonable opportunity for access and storage of their materials and equipment for execution of their work. The DESIGN/BUILD TEAM shall incorporate and coordinate the DESIGN/BUILD TEAM's Work with work of the DFCM's separate contractors as required by the Contract Documents. The DESIGN/BUILD TEAM shall promptly notify the DFCM if any such independent action will in any way compromise the DESIGN/ BUILD TEAM's ability to meet the DESIGN/BUILD TEAMS's responsibilities under this Agreement.

11.14 SEVERABILITY. In case a provision of this Agreement is held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not be affected.

11.15 OBSERVATIONS. The Work shall be observed for acceptance in accordance with the General Conditions. DESIGN/BUILD TEAM shall have a Utah duly licensed architect or engineer, visit the site at least once per week during construction and shall make appropriate observations and promptly write and send to the DFCM written reports for each site visit. DFCM may request more periodic site observations by the A/E

if needed. The A/E shall be compensated for additional work properly performed and approved in advance in writing by DFCM as well as not caused by errors and/or omissions of DESIGN/BUILD TEAM. The A/E shall report promptly any deficiencies, defects or problems with the Work or site conditions.

11.16 RELATIONSHIP OF THE PARTIES AND ASSIGNMENT. The DESIGN/BUILD TEAM accepts the relationship of trust and confidence established by this DESIGN/BUILD TEAM's Agreement and covenants with the DFCM to cooperate with the DFCM and utilize the DESIGN/ BUILD TEAM's best skill, efforts and judgment in furthering the interest of the DFCM; to furnish efficient business administration and supervision; to make best efforts to furnish at all times an adequate supply of workers and materials; and to perform the Work in the best and most expeditious and economic manner consistent with the interests of the DFCM.

11.17 SUCCESSORS AND ASSIGNS. The DFCM and DESIGN/BUILD TEAM, respectively bind themselves, their partners, successors, assigns and legal representatives to the other party to this Agreement, and to partners, successors, assigns and legal representatives of such other party with respect to all covenants, provisions, rights and responsibilities of this Agreement. The DESIGN/BUILD TEAM shall not assign the Contract without the prior written consent of the DFCM, nor shall the DESIGN/BUILD TEAM assign any moneys due or to become due as well as any rights under the Contract, without prior written consent of the DFCM.

The DFCM agrees to exercise reasonable best efforts to enable the DESIGN/BUILD TEAM to perform the Work by furnishing and approving in a timely way, information required by the DESIGN/BUILD TEAM in accordance with the requirements of the Contract Documents.

11.18 AUTHORITY TO EXECUTE AND PERFORM AGREEMENT. DESIGN/BUILD TEAM and DFCM each represent that the execution of this DESIGN/BUILD TEAM's Agreement and the performance thereunder is within their respective duly authorized powers.

11.19 ATTORNEY FEES AND COSTS. Except as otherwise provided in the dispute resolution provisions of the General Conditions, the prevailing party shall be entitled to reasonable attorney fees and costs incurred in any action in the District Court and/or appellate body to enforce this DESIGN/BUILD TEAM's Agreement or recover damages or any other action as a result of a breach thereof.

11.20 EXTENT OF AGREEMENT. This Agreement represents the entire agreement between the DFCM and DESIGN/BUILD TEAM and supersedes any prior negotiations, representations or agreements. This Agreement may be amended only by written instrument signed by both DFCM and DESIGN/BUILD TEAM. The DESIGN/BUILD TEAM and DFCM for themselves, their heirs, successors, executors, and administrators, whichever may be applicable, hereby agree to the full performance of this Agreement and the Contract Documents.

DESIGN/BUILD TEAM and DFCM each represent that the execution of this DESIGN/BUILD TEAM's Agreement and the performance thereunder is within their respective duly authorized powers.

IN WITNESS WHEREOF, the parties hereto have executed this DESIGN/BUILD TEAM's Agreement on the day and year stated hereinabove.

DESIGN/BUILD TEAM: _____

Signature Date

Title: _____

Please type/print name clearly

State of _____)
County of _____)

On this ____ day of _____, 20____, personally appeared before me, _____, whose identity is personally known to me (or proved to me on the basis of satisfactory evidence) and who by me duly sworn (or affirmed), did say that he (she) is the _____ (title or office) of the firm and that said document was signed by him (her) in behalf of said firm.

(SEAL)

Notary Public

My Commission Expires _____

APPROVED AS TO AVAILABILITY
OF FUNDS:

David D. Williams, Jr. Date
DFCM Administrative Services Director

**DIVISION OF FACILITIES
CONSTRUCTION AND MANAGEMENT**

David G. Buxton Date
Director

APPROVED AS TO FORM:
ATTORNEY GENERAL
May 25, 2005
By: ALAN S. BACHMAN
Asst Attorney General

APPROVED FOR EXPENDITURE:

Division of Finance Date

LIST OF ATTACHMENTS

Exhibit “A”	DESIGN/BUILD TEAM Leaders
Exhibit “B” (1.1.1)	Cost Proposal Form with Cost Breakdown
Exhibit “C” (1.3)	List of Competition Documents
Exhibit “D” (1.3)	Clarification Items

PERFORMANCE BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

That _____ hereinafter referred to as the "Principal" and _____, a corporation organized and existing under the laws of the State of _____, with its principal office in the City of _____ and authorized to transact business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah, hereinafter referred to as the "Obligee," in the amount of _____ DOLLARS (\$ _____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the _____ day of _____, 20____, to construct _____ in the County of _____, State of Utah, Project No. _____, for the approximate sum of _____ Dollars (\$ _____), which Contract is hereby incorporated by reference herein.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal shall faithfully perform the Contract in accordance with the Contract Documents including, but not limited to, the Plans, Specifications and conditions thereof, the one year performance warranty, and the terms of the Contract as said Contract may be subject to Modifications or changes, then this obligation shall be void; otherwise it shall remain in full force and effect.

No right of action shall accrue on this bond to or for the use of any person or corporation other than the state named herein or the heirs, executors, administrators or successors of the Owner.

The parties agree that the dispute provisions provided in the Contract Documents apply and shall constitute the sole dispute procedures of the parties.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the Provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20____.

WITNESS OR ATTESTATION:

PRINCIPAL:

By: _____

(Seal)

Title: _____

WITNESS OR ATTESTATION:

SURETY:

By: _____

Attorney-in-Fact (Seal)

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 20____, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney in-fact of the above-named Surety Company and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20____.

My commission expires: _____

Resides at: _____

NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

PAYMENT BOND

(Title 63, Chapter 56, U. C. A. 1953, as Amended)

KNOW ALL PERSONS BY THESE PRESENTS:

That _____ hereinafter referred to as the "Principal," and _____, a corporation organized and existing under the laws of the State of _____ authorized to do business in this State and U. S. Department of the Treasury Listed (Circular 570, Companies Holding Certificates of Authority as Acceptable Securities on Federal Bonds and as Acceptable Reinsuring Companies); with its principal office in the City of _____, hereinafter referred to as the "Surety," are held and firmly bound unto the State of Utah hereinafter referred to as the "Obligee," in the amount of _____ Dollars (\$ _____) for the payment whereof, the said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has entered into a certain written Contract with the Obligee, dated the _____ day of _____, 20____, to construct _____ in the County of _____, State of Utah, Project No. _____ for the approximate sum of _____ Dollars (\$ _____), which contract is hereby incorporated by reference herein.

NOW, THEREFORE, the condition of this obligation is such that if the said Principal shall pay all claimants supplying labor or materials to Principal or Principal's Subcontractors in compliance with the provisions of Title 63, Chapter 56, of Utah Code Annotated, 1953, as amended, and in the prosecution of the Work provided for in said Contract, then, this obligation shall be void; otherwise it shall remain in full force and effect.

That said Surety to this Bond, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or to the Work to be performed thereunder, or the specifications or drawings accompanying same shall in any way affect its obligation on this Bond, and does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to the Work or to the specifications or drawings and agrees that they shall become part of the Contract Documents.

PROVIDED, HOWEVER, that this Bond is executed pursuant to the provisions of Title 63, Chapter 56, Utah Code Annotated, 1953, as amended, and all liabilities on this Bond shall be determined in accordance with said provisions to the same extent as if it were copied at length herein.

IN WITNESS WHEREOF, the said Principal and Surety have signed and sealed this instrument this _____ day of _____, 20____.

WITNESS OR ATTESTATION:

PRINCIPAL:

By: _____ (Seal)

Title: _____

WITNESS OR ATTESTATION:

SURETY:

By: _____ Attorney-in-Fact (Seal)

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____, 20____, personally appeared before me _____, whose identity is personally known to me or proved to me on the basis of satisfactory evidence, and who, being by me duly sworn, did say that he/she is the Attorney-in-fact of the above-named Surety Company, and that he/she is duly authorized to execute the same and has complied in all respects with the laws of Utah in reference to becoming sole surety upon bonds, undertakings and obligations, and that he/she acknowledged to me that as Attorney-in-fact executed the same.

Subscribed and sworn to before me this _____ day of _____, 20____.

My commission expires: _____

Resides at: _____

NOTARY PUBLIC

Agency: _____
Agent: _____
Address: _____
Phone: _____

Approved As To Form: May 25, 2005
By Alan S. Bachman, Asst Attorney General

**Division of Facilities Construction and Management****DFCM****CERTIFICATE OF SUBSTANTIAL COMPLETION**

PROJECT _____ PROJECT NO: _____

AGENCY/INSTITUTION _____

AREA ACCEPTED _____

The Work performed under the subject Contract has been reviewed on this date and found to be Substantially Completed as defined in the General Conditions; including that the construction is sufficiently completed in accordance with the Contract Documents, as modified by any change orders agreed to by the parties, so that the State of Utah can occupy the Project or specified area of the Project for the use for which it is intended.

The DFCM accepts the Project or specified area of the Project as Substantially Complete and will assume full possession of the Project or specified area of the Project at _____ (time) on _____ (date).

The DFCM accepts the Project for occupancy and agrees to assume full responsibility for maintenance and operation, including utilities and insurance, of the Project subject to the itemized responsibilities and/or exceptions noted below:

A list of items to be completed or corrected is attached hereto. The failure to include an item on it does not alter the responsibility of the Contractor to complete all the Work in accordance with the Contract Documents, including authorized changes thereof.

The Contractor shall complete or correct the Work on the list of items appended hereto within _____ calendar days from the above date of issuance of this Certificate. The amount withheld pending completion of the list of items noted and agreed to shall be: \$_____.

CONTRACTOR (include name of firm) by: _____ DATE

A/E by: _____ DATE

USING INSTITUTION OR AGENCY by: _____ DATE

DFCM by: _____ DATE

cc: Parties Noted
DFCM, Director

HAVEN J. & BONNIE RAE BARLOW MANUFACTURING TECHNOLOGY BUILDING OUTLINE SPECIFICATIONS



01 August 2007
DFCM #07036220



HAVEN J. & BONNIE RAE BARLOW MANUFACTURING TECHNOLOGY BUILDING

Davis Applied Technology College

HFSArchitects



DOCUMENTSNUMBER OF PAGESOUTLINE SPECIFICATIONS

Division 2 - SITE CONSTRUCTION

02230	SITE CLEANING	1
02300	EARTHWORK	2
02510	WATER DISTRIBUTION	2
02530	SANITARY SEWERAGE	1
02630	STORM DRAINAGE	1
02741	ASPHALT PAVING	1
02751	CEMENT CONCRETE PAVEMENT	1
02810	IRRIGATION SYSTEMS	1
02920	LAWN AND GRASSES	1
02930	EXTERIOR PLANTS	2

Division 3 - CONCRETE

03300	CAST-IN-PLACE CONCRETE	2
03450	ARCHITECTURAL PRECAST CONCRETE	2
03491	GLASS FIBER REINFORCED CONCRETE	1

Division 4 - MASONRY

04810	UNIT MASONRY ASSEMBLIES	2
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Division 5 - METALS

05120	STRUCTURAL STEEL	2
05210	STEEL JOISTS	1
05310	STEEL DECK	1
05500	METAL FABRICATIONS	1

Division 6 - WOOD

06105	MISCELLANEOUS CARPENTRY	2
06402	INTERIOR ARCHITECTURAL WOODWORK	2

Division 7 - THERMAL AND MOISTURE PROTECTION

07511	BUILT-UP ASPHALT ROOFING	2
07620	SHEET METAL FLASHING	1
07720	ROOF ACCESSORIES	1
07920	JOINT SEALANTS	2

Division 8 - DOORS AND WINDOWS

08110	STEEL DOORS AND FRAMES	1
08211	FLUSH WOOD DOORS	1
08311	ACCESS DOORS AND FRAMES	1
08331	OVERHEAD COILING DOORS	1
08411	ALUMINUM FRAMED ENTRANCES AND STOREFRONTS	2
08470	REVOLVING ENTRANCE DOORS	1
08520	ALUMINUM WINDOWS	1
08620	UNIT SKYLIGHTS	1
08710	DOOR HARDWARE	1
08800	GLAZING	2
08911	GLAZED ALUMINUM CURTAINWALLS	1

Division 9 - FINISHES

09111	NON-LOAD-BEARING STEEL FRAMING	1
09250	GYPSUM BOARD	1
09310	CERAMIC TILE	1
09511	ACOUSTIC PANEL CEILINGS	1
09512	ACOUSTICAL TILE CEILINGS	1
09653	RESILIENT WALL BASE AND ACCESSORIES	1
09681	CARPET TILE	1
09912	INTERIOR PAINTING	1

Division 10 - SPECIALTIES

10101	VISUAL DISPLAY SURFACES	1
10155	TOILET COMPARTMENTS	1
10505	METAL LOCKERS	1
10522	FIRE EXTINGUISHER CABINETS	1
10523	FIRE EXTINGUISHER	1
10801	TOILET & BATH ACCESSORIES	1

Division 11 - EQUIPMENT

11132	PROJECTION SCREENS	1
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SECTION 02230 - SITE CLEARING

1.1 SUMMARY

- A. Removing existing plants and grass.
- B. Clearing and grubbing obstructions, trees, shrubs, grass, and other vegetation including grinding stumps and removing roots and debris.
- C. Stripping and stockpiling topsoil and stockpiling surplus topsoil.
- D. Providing temporary erosion and sedimentation control measures.

END OF SECTION 02230

SECTION 02300 - EARTHWORK

1.1 SUMMARY

- A. Preparing subgrades for slabs-on-grade walks pavements lawns and grasses exterior plants.
- B. Excavating and backfilling or filling for buildings and structures, including footings and foundations .
- C. Excavating and backfilling for utility trenches.
- D. Excavation: Unclassified.
- E. Grading.
- F. Subsurface drainage backfill for walls and trenches.
- G. Subbase course for concrete walks and pavements.
- H. Subbase course for hot-mix asphalt pavement.
- I. Drainage course for cast-in-place concrete slabs-on-grade.

1.2 MATERIALS

- A. Soil Materials:
 - 1. Satisfactory Soils: ASTM D 2487 soil classification groups.
 - 2. Unsatisfactory Soils: ASTM D 2487 soil classification groups.
 - 3. Backfill and Fill: Satisfactory soil materials.
 - 4. Subbase Course: Natural or crushed gravel, crushed stone, and natural or crushed sand.
 - 5. Engineered Fill: Natural or crushed gravel, crushed stone, and natural or crushed sand.
 - 6. Bedding Course: Natural or crushed gravel, crushed stone, and natural or crushed sand.
 - 7. Drainage Course: Crushed stone, or crushed or uncrushed gravel.
 - 8. Filter Material: Natural or crushed gravel, or crushed stone and natural sand.
 - 9. Sand: Natural or manufactured.
 - 10. Impervious Fill: Clayey gravel and sand mixture.
- B. Controlled low-strength material.
- C. Warning Tape: Detectable polyethylene film.

1.3 EXCAVATION

- A. Explosives: Not permitted.

- B. Disposal of Surplus and Waste Materials: Off Owner's property.

1.4 FIELD QUALITY CONTROL

- A. Geotechnical Testing Agency: Owner engaged.

END OF SECTION 02300

SECTION 02510 - WATER DISTRIBUTION

**1.1
SUMMARY**

- A. Combined water service and fire-service mains outside the building.

1.2 SUBMITTALS

- A. Coordination Drawings.

1.3 QUALITY ASSURANCE

- A. Quality Standard for Electrical Components, Devices, and Accessories: NFPA 70.
- B. Quality Standard for Materials, Installations, Tests, Flushing, and Valve and Hydrant Supervision for Fire-Service-Main Piping: NFPA 24.
- C. Quality Standard for Plastic Potable-Water-Service Piping: NSF 14. Include marking "NSF-pw" on piping.
- D. Quality Standard for Water-Service Piping and Specialties for Domestic Water: NSF 61.
- E. Quality Standard for Fire-Service-Main Products: FMG's "Approval Guide."

1.4 MATERIALS

- A. Underground Water-Service Piping NPS 3/4 to NPS 3:
 - 1. Soft copper tube and copper solder-joint fittings.
- B. Underground Combined Water-Service and Fire-Service-Main Piping:
 - 1. Ductile-iron, grooved-end pipe and ductile-iron-pipe appurtenances.
- C. Piping Specialties:
 - 1. Transition fittings.
 - 2. Tubular-sleeve pipe couplings.
 - 3. Split-sleeve pipe couplings.
 - 4. Flexible connectors.
 - 5. Dielectric fittings.
- D. Corrosion-Protection Piping Encasement: Required.

1.5 MANUFACTURED UNITS

A. Gate Valves:

1. Cast Iron: OS&Y, rising stem, C509, 250 psig.
2. UL/FMG, Cast Iron: OS&Y, rising stem.
3. Bronze: UL/FMG, OS&Y, rising stem.

B. Check Valves: UL/FMG, 250 psig.

C. Butterfly Valves: UL/FMG.

D. Backflow Preventers:

1. Double-check, backflow-prevention assemblies.

END OF SECTION 02510

SECTION 02530 - SANITARY SEWERAGE

1.1 SUMMARY

- A. Gravity-flow, nonpressure sanitary sewerage outside the building.

1.2 PERFORMANCE REQUIREMENTS

- A. Gravity-Flow, Nonpressure, Drainage-Piping Pressure Rating: 10-foot head of water.

1.3 COMPONENTS

- A. Cleanouts: PVC.
- B. Manholes: Standard precast concrete.
 - 1. Resilient pipe connectors.
 - 2. Reinforced-concrete grade rings.
 - 3. Manhole frames and covers.

1.4 INSTALLATION

- A. Gravity-Flow, Nonpressure Sewer Piping Applications:
 - 1. NPS 4: ABS, SDR 35, sewer; PVC sewer; or Nonreinforced-concrete sewer pipe.
 - 2. NPS 5 and NPS 6: ABS, SDR 35, sewer; PVC sewer; or Nonreinforced-concrete sewer pipe.
 - 3. NPS 8 and NPS 10: ABS, SDR 42, sewer; PVC sewer; or Nonreinforced-concrete sewer pipe.

END OF SECTION 02530

SECTION 02630 - STORM DRAINAGE

1.1 SUMMARY

- A. Gravity-flow, non-pressure storm drainage outside the building.

1.2 PERFORMANCE REQUIREMENTS

- A. Gravity-Flow, Nonpressure, Drainage-Piping Pressure Rating: 10-foot head of water.

1.3 COMPONENTS

- A. Cleanouts: PVC.in landscape; cast iron in paving.
- B. Drains: Gray-iron area drains.
- C. Manholes: Standard precast concrete.
 - 1. Resilient pipe connectors.
 - 2. Reinforced-concrete grade rings.
 - 3. Manhole frames and covers.
- D. Catch Basins: Standard precast concrete.
 - 1. Frames and grates.
- E. Stormwater Inlets: gutter type.

1.4 INSTALLATION

- A. Gravity-Flow, Nonpressure Sewer Piping Applications:
 - 1. NPS 4 to NPS 6: Corrugated PE drainage; ABS, SDR 35, sewer; PVC sewer; or Nonreinforced-concrete sewer pipe.
 - 2. NPS 8 to NPS 12: Corrugated PE drainage; ABS, SDR 42, sewer Corrugated PE drainage PVC sewer Nonreinforced-concrete sewer pipe.
 - 3. NPS 15: Corrugated PE drainage; PVC profile gravity sewer; or Nonreinforced-concrete sewer pipe.
 - 4. NPS 18 to NPS 36: Corrugated PE drainage; PVC sewer; or Reinforced-concrete sewer pipe.

END OF SECTION 02630

SECTION 02741 - ASPHALT PAVING

1.1 SUMMARY

- A. Hot-mix asphalt paving.
- B. Pavement-marking paint.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements: of UDOT Standard Specification for Road and Bridge Construction.

1.3 MATERIALS

- A. Asphalt Materials:
 - 1. Asphalt Binder: AASHTO M 320 or AASHTO MP 1a.
 - 2. Asphalt Cement: ASTM D 3381 for viscosity-graded material ASTM D 946 for penetration-graded material.
 - 3. Prime Coat: Asphalt emulsion prime coat.
 - 4. Tack Coat: Emulsified asphalt or cationic emulsified asphalt.
- B. Auxiliary Materials:
 - 1. Herbicide.
 - 2. Pavement-Marking Paint: Alkyd-resin type.
- C. Asphalt Mixes: Designed according to AI MS-2.
 - 1. Base Course: ASTM D 3515, 1-inch maximum aggregate size.
 - 2. Surface Course: ASTM D 3515, 1/2-inch maximum aggregate size.

1.4 INSTALLATION

- A. Hot-Mix Asphalt Paving:
 - 1. Proof-roll subgrade at locations receiving full-depth asphalt pavement.
 - 2. Apply herbicide.
 - 3. Apply prime coat over compacted unbound-aggregate base course.
 - 4. Base Course: 12".
 - 5. Surface Course: 5" for roadways, 4" for parking lots.

END OF SECTION 02741

SECTION 02751 - CEMENT CONCRETE PAVEMENT

1.1 SUMMARY

- A. Curbs and gutters.
- B. Walkways.

1.2 QUALITY ASSURANCE

- A. Quality Standard: ACI 301, "Specification for Structural Concrete."

1.3 MATERIALS

A. Reinforcement:

- 1. Reinforcing Bars and Tie Bars: Epoxy-coated deformed or Galvanized deformed steel.
- 2. Synthetic Fiber: Fibrillated at the rate of 1.5#/CY.
- 3. Welded wire mesh not allowed.

B. Concrete:

- 1. Portland Cement: ASTM C 150 with Fly Ash: ASTM C 618, Class F; maximum 15% by weight
- 2. Aggregate: Normal-weight aggregate.
- 3. Admixture: Air entraining- 6.5% plus-or-minus 1.5%.
- 4. Compressive Strength: 4000 psi at 28 days.
- 5. Water/Cement Ratio: 0.45%.

C. Membrane-Forming Curing Compound: White waterborne.

D. Related Materials:

- 1. Expansion- and Isolation-Joint-Filler Strips: Cellulosic fiber.

1.4 FINISHING

- A. Finishes: Medium-to-coarse-textured broom finish.

1.5 FIELD QUALITY CONTROL

- A. Testing: By Owner-engaged agency.

END OF SECTION 02751

SECTION 02810 - IRRIGATION SYSTEMS

1.1 PERFORMANCE REQUIREMENTS

- A. Irrigation zone control shall be automatic operation with controller and automatic control valves.
- B. Minimum Working Pressures:
 - 1. Irrigation Main Piping: 200 psig.
 - 2. Circuit Piping: 150 psig.

1.2 UNDERGROUND IRRIGATION MAIN PIPING

- A. Pipe:
 - 1. Schedule 40 Schedule 80, PVC pipe and Schedule 80 PVC or "Harco" ductile iron socket fittings, and solvent-cemented joints.

1.3 CIRCUIT PIPING

- A. Pipe:
 - 1. SDR 26, PVC, pressure-rated pipe; Schedule 40, PVC socket fittings; and solvent-cemented joints.

1.4 DRAIN PIPING

- A. Schedule 40, PVC pipe and socket fittings; and solvent-cemented joints.

1.5 ABOVEGROUND, SHUTOFF-DUTY VALVES

- A. NPS 2 and Smaller:
 - 1. Brass or bronze ball valve.
- B. NPS 2-1/2 and Larger:
 - 1. Iron ball valve.

1.6 THROTTLING-DUTY VALVES

- A. NPS 2 and Smaller:

1. Bronze automatic control valve.

B. NPS 2-1/2 and NPS 3:

1. Bronze automatic control valve.

1.7 DRAIN VALVES

A. NPS ½ and NPS 3/4: Bronze gate valve.

B. NPS 1 to NPS 2: Bronze gate valve.

1.8 MANUFACTURED UNITS

A. Automatic Control Valves: Bronze- by Orbit coordinate with DATC campus standard.

B. Pop-up, Impact-Drive Rotary Sprinklers: Plastic by Orbit- coordinate with DATC campus standard.

C. Surface, Pop-up Spray Sprinklers: Plastic- by Orbit with DATC campus standard..

D. Boxes for Automatic Control Valves: Plastic.

END OF SECTION 02810

SECTION 02920 - LAWNS AND GRASSES

1.1 SUMMARY

- A. Sodded turf.

1.2 MAINTENANCE SERVICE

- A. Turf: 30 days from date of Substantial Completion.

1.3 MATERIALS

- A. Turfgrass Sod: Local mix with low water requirement.
- B. Planting Soils: Existing, in-place surface soil, amended with inorganic and organic soil amendments and fertilizers in specified quantities.
- C. Pesticides.

1.4 INSTALLATION

- A. Planting Soil Depth for Newly Graded Subgrades: 4 inches.
- B. Surface Soil Enrichment Depth for Unchanged Subgrades: 4 inches.

END OF SECTION 02920

SECTION 02930 - EXTERIOR PLANTS

1.1 WARRANTY

- A. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months.
- B. Ground Covers, Biennials, Perennials, and Other Plants: 12 months.
- C. Annuals: Three months.

1.2 MAINTENANCE SERVICE

- A. Trees and Shrubs: Three months.
- B. Ground Cover and Other Plants: Three months.

1.3 MATERIALS

- A. Plants, General: Nursery-grown and complying with ANSI Z60.1.
- B. Annuals and Biennials: Healthy and acclimated to outdoor conditions.
- C. Planting Soils: Existing, in-place surface soil, amended with inorganic and organic soil amendments and fertilizers in specified quantities.
- D. Lightweight On-Structure Planting Soil: Modified planting soil.
- E. Mulches: Ground or shredded bark and crushed stone or gravel.
- F. Weed-Control Barriers: Nonwoven fabric.
- G. Herbicides: Registered and approved by EPA pre-emergent and post-emergent herbicide(s).
- H. Tree Stabilization: Upright staking and tying.
- I. Landscape Edgings: Concrete.
- J. Root barrier.

1.4 INSTALLATION

- A. Planting Soil Depth: 6 inches.
- B. Mechanized tree spade planting of designated trees.
- C. Pruning.

EXTERIOR PLANTS

- D. Ground Cover and Plant Planting: Space ground cover and plants other than trees, shrubs, and vines 24 inches apart in even rows with triangular spacing.
- E. Mulching:
 - 1. Trees and Tree-like Shrubs in Turf Areas: Organic mulch ring of 2-inch thickness with 12-inch] 24-inch radius.
 - 2. Planting Areas: 2-inch average thickness of organic mulch extending 12 inches beyond edge of individual planting pit or trench and over whole surface of planting area.

END OF SECTION 02930

Section 03300 - CAST-IN-PLACE CONCRETE

1.1 SUMMARY

- A. Cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes, for the following:
 - 1. Footings.
 - 2. Foundation walls.
 - 3. Slabs-on-grade.

1.2 QUALITY ASSURANCE

- A. Quality Standard: ACI 301.
- B. Mockups to demonstrate typical joints, surface finish, texture, tolerances, and standard of workmanship.

1.3 MATERIALS

- A. Form-facing materials.
- B. Steel Reinforcement:
 - 1. Reinforcing Bars: Deformed Steel bar mats.
- C. Concrete Materials:
 - 1. Portland Cement: ASTM C 150, Type I/II, gray, supplemented with fly ash.
 - 2. Aggregate: Normal weight.
 - 3. Water.
 - 4. Admixtures: High range, water reducing.
- D. Curing Materials: Clear, waterborne, membrane-forming curing, dissipating compound.
- E. Sealer: Seal floors to be left exposed with Ashford Formula.
- F. Related Materials: Expansion- and isolation-joint-filler strips.

1.4 CONCRETE MIXTURES

- A. Compressive Strength (28 Days):
 - 1. Footings: 3000 psi.
 - 2. Foundation Walls: 3500 psi.

3. Slabs-on-Grade: 4000 psi.

B. Mixing: Ready mixed.

1.5 INSTALLATION

A. Formed-Surface Finish: Smooth.

B. Floor and Slab Finishes:

1. Scratch: Surfaces to receive mortar setting beds for bonded cementitious floor finishes.
2. Trowel: Surfaces exposed to view, and surfaces to be covered with resilient flooring carpet ceramic or quarry tile set over a cleavage membrane thin film-finish coating system.

1.6 FIELD QUALITY CONTROL

A. Testing: By Owner-engaged agency.

B. Inspections: By Owner-engaged special inspector.

END OF SECTION 03300

SECTION 03450 - ARCHITECTURAL PRECAST CONCRETE

1.1 SUMMARY

- A. Architectural precast concrete cladding units.

1.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Fabricator to design architectural precast concrete units.

1.3 QUALITY ASSURANCE

- A. Installer: PCI-certified erector.
- B. Fabricator: PCI-certified plant.
- C. Design Standards: ACI 318 and PCI MNL 120.
- D. Quality-Control Standard: PCI MNL 117.
- E. Sample panels for each finish, color, and texture variation.
- F. Mockups.
- G. Preconstruction testing mockup.

1.4 MATERIALS

- A. Reinforcing Materials:
 - 1. Reinforcing Bars: Epoxy-coated steel
- B. Concrete Materials:
 - 1. Portland Cement: ASTM C 150, Type I or Type III.
 - 2. Supplementary Cementitious Materials: Fly ash.
 - 3. Aggregates: Normal weight.
 - 4. Coloring admixture: Match existing
 - 5. Admixtures: Air entraining and water reducing,
- C. Steel Connections High-strength bolts and nuts.
 - 1. Finish: Galvanized.

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- D. Grout: Nonmetallic, nonshrink.
- E. Latex-portland cement pointing grout for thin brick unit joints.
- F. Stone facing specified in Division 4 with stainless-steel anchors.

1.5 CONCRETE MIXTURES

- A. Compressive Strength (28 Days):
 - 1. Normal-Weight Concrete Face and Backup Mixtures: 5000 psi.
 - 2. Lightweight Concrete Backup Mixtures: 5000 psi.

1.6 FABRICATION

- A. Finishes: Medium sand blasted finish.

1.7 FIELD QUALITY CONTROL

- A. Special Inspections: By Owner-engaged agency.
- B. Testing and Inspections: By Owner-engaged agency.

END OF SECTION 03450

SECTION 03491 - GLASS FIBER REINFORCED CONCRETE

1.1 SUMMARY

- A. Glass fiber reinforced concrete (GFRC) panels including panel frames, anchors, and connection hardware.
- B. Application: Fascia units.

1.2 PERFORMANCE REQUIREMENTS

- A. Design Loads: As indicated on Drawings.

1.3 QUALITY ASSURANCE

- A. Manufacturer: PCI-Certified Plant.
- B. Manufacturer to engineer GFRC panels.
- C. Design Standard: PCI MNL 128.
- D. Quality Standard: PCI MNL 130.
- E. Mockups for each form of construction and finish.

1.4 MATERIALS

- A. GFRC Materials:
 - 1. Portland Cement: ASTM C 150, Type 1, II, or III, Match existing.
 - 2. Glass fibers.
 - 3. Facing aggregate.
 - 4. Coloring admixture.
 - 5. Polymer-curing admixture.
 - 6. Air-entraining admixture.
- B. Anchors and Connectors: Zinc coated.
- C. Panel Frame Materials:
 - 1. Cold-Formed Steel Framing: C-shaped steel studs, metallic coated.
- D. Finishes: Sand blast.

END OF SECTION 03491

SECTION 04810 - UNIT MASONRY ASSEMBLIES

1.1 SUMMARY

A. Masonry Construction:

1. Single-wythe masonry.
2. Cavity walls.
3. Masonry veneer.
4. Installation of pre-cast trim.

1.2 PERFORMANCE REQUIREMENTS

- A. Net-Area Compressive Strengths (f'_m) of Structural Unit Masonry:** As indicated.
- B. Determine net-area compressive strength (f'_m) of masonry by testing masonry prisms.**

1.3 QUALITY ASSURANCE

- A. Preconstruction Testing Service:** Owner engaged, with payment by Owner.
- B. 48" long by 48" high mockups of typical wall system.**

1.4 MATERIALS

A. Concrete Masonry Units (CMUs):

1. Units made with integral water repellent for exposed units.
2. Concrete Masonry Units: Lightweight. 8" x 8" x 16", 8" x 10" x 16" modular

B. Sills, Lintels and trim pieces: precast concrete.

C. Brick: Face brick. 4" x 4" x 16" modular- match color of existing

D. Reinforcing Steel: Uncoated steel bars.

E. Masonry Joint Reinforcement:

1. Interior Walls: Mill carbon steel.
2. Exterior Walls: Hot-dip galvanized steel.

F. Ties and Anchors: Hot-dip Galvanized steel.

1. Adjustable Masonry-Veneer Anchors: Seismic.

G. Embedded Flashing:

1. Concealed (Flexible) Flashing: asphalt-coated copper.
 - a. Used with flashing terminations.

H. Weep/Vent Holes: Open head joints.

I. Cavity drainage material.

J. Reinforcing bar positioners.

K. Cavity-Wall Insulation: Extruded-polystyrene board.

L. Mortar: Match existing.

1. Masonry cement and mortar cement not allowed.

1.5 SOURCE QUALITY CONTROL

- A. Testing Agency: Owner engaged, with payment by Owner.

1.6 INSTALLATION

- A. Match existing masonry coursing, bonding, color, and texture.
- B. Bond Pattern: Running bond.

1.7 FIELD QUALITY CONTROL

- A. Testing Agency: Owner engaged, with payment by Owner.

END OF SECTION 04810

SECTION 05120 - STRUCTURAL STEEL

1.1 SUMMARY

- A. Structural-steel framing.

1.2 QUALITY ASSURANCE

- A. Fabricator Qualifications: AISC-Certified Plant.
- B. Quality Standard: AISC's "Code of Standard Practice for Steel Buildings and Bridges" and "Specification for Structural Steel Buildings--Allowable Stress Design and Plastic Design."

1.3 MATERIALS

- A. Structural-Steel Shapes: Tube and W shapes.
- B. Bolts, Nuts, and Washers: High strength.
- C. Connectors: Shear connectors.
- D. Primer: Fabricator's standard, nonasphaltic.
- E. Grout: Nonmetallic, shrinkage resistant.

1.4 FABRICATION

- A. Shop Connections: high-strength bolts and welded connections.
- B. Surface Preparation: SSPC-SP 2.
- C. Galvanizing: Hot dip for ferrous metal exposed to weather .

1.5 SOURCE QUALITY CONTROL

- A. Testing Agency: Owner engaged.

1.6 INSTALLATION

- A. Field Connections: high-strength bolts and welded connections.

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1.7 FIELD QUALITY CONTROL

- A. Testing Agency: Owner engaged.

END OF SECTION 05120

SECTION 05210 - STEEL JOISTS

1.1 SUMMARY

- A. Open-web K-series steel joists for roof framing.
- B. KCS-type, open-web K-series steel joists for roof framing.
- C. Joist girders for roof framing.
- D. Joist accessories, including permanent bridging.

1.2 MATERIALS

- A. Bolts: High-strength carbon steel.
 - 1. Finish: Plain, uncoated.
- B. Primer: SSPC-Paint 15.
- C. Open-Web K-Series Steel Joists.
- D. Joist Girders:
 - 1. End Arrangement: Underslung.
 - 2. Top-Chord Arrangement: Parallel.

1.3 INSTALLATION

- A. Connections: Welded.

1.4 FIELD QUALITY CONTROL

- A. Testing Agency: Owner will engage testing agency to inspect field welds and bolted connections.

END OF SECTION 05210

SECTION 05310 - STEEL DECK

1.1 SUMMARY

- A. Roof deck.

1.2 MATERIALS

- A. Roof Deck: Galvanized or Aluminum-zinc alloy-coated steel sheet.
 - 1. Profile Depth: 1-1/2 inches.
- B. Accessories: recessed sump pans.

1.3 INSTALLATION

- A. Roof Deck: Welded.

1.4 FIELD QUALITY CONTROL

- A. Testing Agency: Owner engaged.

END OF SECTION 05310

SECTION 05500 - METAL FABRICATIONS

1.1 SUMMARY

- A. Miscellaneous metal framing and supports.
- B. Loose metal plates and shapes.
- C. Miscellaneous fabricated metal items.

1.2 PRODUCTS

- A. Materials: Steel plates, shapes, and bars Steel tubing Steel pipe Slotted channel framing.
- B. Miscellaneous Framing and Supports:
 - 1. Steel framing and supports for overhead doors countertops applications where framing and supports are not specified in other Sections.
 - 2. Galvanize at exterior locations.
 - 3. Prime with zinc-rich primer where indicated.
- C. Loose bearing and leveling plates , primed with zinc-rich primer.
- D. Miscellaneous Steel Trim: .
 - 1. Galvanize exterior locations.
 - 2. Prime interior locations with zinc-rich primer.
- E. Metal Ladders: Steel.
 - 1. Prime interior locations with zinc-rich primer.
- F. Metal Bollards: Schedule 40 steel pipe.

END OF SECTION 05500

SECTION 06105 - MISCELLANEOUS CARPENTRY

1.1 SUMMARY

- A. Rooftop equipment bases and support curbs.
- B. Wood blocking and nailers.
- C. Plywood backing panels.

1.2 MATERIALS

A. Wood-Preservative-Treated Materials:

- 1. Preservative Treatment: AWPA C2 with chemicals containing no arsenic or chromium.
 - a. AWPA C31 (inorganic boron) may be used in protected locations.
- 2. Application: Items indicated and the following:
 - a. Items in contact with roofing or waterproofing.
 - b. Items in contact with concrete or masonry.
 - c. Framing less than 18 inches above ground in crawlspaces.

B. Fire-Retardant-Treated Materials:

- 1. Application: Items indicated and the following:
 - a. Concealed blocking.
 - b. Plywood backing panels.

C. Dimension Lumber Framing:

- 1. Maximum Moisture Content: 19 percent.
- 2. Other Framing: Construction or No. 2 grade hem-fir.

D. Plywood backing panels for telephone and electrical equipment.

E. Fasteners: Hot-dip galvanized steel where exposed to weather, in ground contact, in contact with treated wood, or in area of high relative humidity.

F. Metal Framing Anchors:

- 1. Metal: Hot-dip galvanized steel.

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END OF SECTION 06105

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SECTION 06402 - INTERIOR ARCHITECTURAL WOODWORK

1.1 SUMMARY

- A. Interior standing and running trim.
- B. Wood and plastic-laminate cabinets.
- C. Solid-surfacing-material countertops.
- D. Closet and utility shelving.

1.2 QUALITY ASSURANCE

- A. Quality Standard: AWI.

1.3 MATERIALS

- A. Wood Species and Cut for Transparent Finish: Red oak, plain sawn or sliced.
- B. Composite Wood Products: Made without urea formaldehyde.
- C. Cabinet Hardware:
 - 1. Hinges: Frameless, concealed.
 - 2. Pulls: Back mounted Wire.
 - 3. Exposed Hardware Finishes: Satin chromium plated.
- D. Interior Woodwork Grade: Custom.
- E. Interior Standing and Running Trim for Transparent Finish:
 - 1. Grade: Custom.
 - 2. Wood Species and Cut: Red oak, plain sawn.
- F. Wood Cabinets for Transparent Finish:
 - 1. Grade: Custom.
 - 2. AWI Type of Cabinet Construction: Flush overlay.
 - 3. Wood Species and Cut for Exposed Surfaces: Red oak, plain sawn or cut.
 - 4. Cabinet Interior: Thermoset decorative panels.
- G. Plastic-Laminate Cabinets:
 - 1. Grade: Custom.

2. AWI Type of Cabinet Construction: Flush overlay.
3. Cabinet Interior: Thermoset decorative panels.

H. Solid-Surfacing-Material Countertops:

1. Grade: Custom.
2. Thickness: ½ inch.

I. Closet and Utility Shelving: Custom grade.

J. Shop Finishing:

1. Grade: Same grade as woodwork.
2. Extent: All woodwork shop finished.

END OF SECTION 06402

SECTION 07511 - BUILT-UP ASPHALT ROOFING

1.1 SUMMARY

- A. Built-up asphalt roofing system.
- B. Vapor retarder.
- C. Roof insulation.
- D. Wood fiber or perlite cant and tapered edge strips.

1.2 PERFORMANCE REQUIREMENTS

- A. Roofing System Design: Uplift pressures calculated according to ASCE 7.
- B. FMG Listing: Class 1A-90

1.3 QUALITY ASSURANCE

- A. Exterior Fire-Test Exposure: Class A.
- B. Pre-installation conference.

1.4 WARRANTY

- A. Manufacturer's Materials and Workmanship Warranty: 20 years.
- B. Installer's Warranty: Two years.

1.5 MATERIALS

- A. Sheathing paper. Red rosin. ASTM D549
- B. Base Sheet: Asphalt-coated, glass-fiber sheet. Type II, ASTM D4601
- C. Roofing Membrane Plies: Glass-fiber ply felts, Type VI: ASTM

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- D. Flashing Sheet:
 - 1. SBS-Modified Asphalt: White granular surfaced.
- E. Roofing Asphalt: ASTM D 312, Type **IV**.
- F. Aggregate Surfacing: Crushed stone.
- G. Separator Sheet: Polyethylene sheet.
- H. Vapor Retarder: Polyethylene sheet.
- I. Roof Insulation: R-32 Polyisocyanurate board.
- J. Cover Board: 3/4" Perlite insulation board.
- K. Tapered Cover Board: 3/4" (Min) Perlite insulation board, minimum 1/4" per foot slope.

1.6 INSTALLATION

- A. Roof Insulation: Mechanically fastened to roof deck.
- B. Roofing Membrane System: Four ply sheets.
- C. Roofing Membrane Surfacing: Aggregate.

1.7 FIELD QUALITY CONTROL

- A. Testing Agency: Owner engaged.

END OF SECTION 07511

SECTION 07620 - SHEET METAL FLASHING AND TRIM

1.1 SUMMARY

- A. Formed Low-Slope Roof Flashing and Trim:
 - 1. Copings.

1.2 PERFORMANCE REQUIREMENTS

- A. Copings: Capable of resisting Wind Zone 2 forces according to FMG Loss Prevention Data Sheet 1-49.

1.3 QUALITY ASSURANCE

- A. Quality Standard: SMACNA's "Architectural Sheet Metal Manual."

1.4 MATERIALS

- A. Sheet Metals for Flashing and Trim:
 - 1. Prepainted, Metallic-Coated Steel: High-performance organic.
- B. Underlayment: Polyethylene sheet.

END OF SECTION 07620

SECTION 07720 - ROOF ACCESSORIES

1.1 SUMMARY

- A. Roof hatches.

1.2 QUALITY ASSURANCE

- A. Sheet Metal Standard: SMACNA's "Architectural Sheet Metal Manual."

1.3 WARRANTY

- A. Special Warranty on Painted Finishes: 15 years from date of Substantial Completion.

1.4 PRODUCTS

- A. Roof Hatches: Prepainted, metallic-coated steel.

1.5 FABRICATION

- A. Connections: Welded.

END OF SECTION 07720

SECTION 07920 - JOINT SEALANTS

1.1 SUMMARY

- A. Exterior Joints in Vertical Surfaces and Horizontal Nontraffic Surfaces:
 - 1. Control and expansion joints in unit masonry.
 - 2. Joints between different materials listed above.
 - 3. Perimeter joints around frames of doors windows.
- B. Exterior Joints in Horizontal Traffic Surfaces:
 - 1. Isolation and contraction joints in cast-in-place concrete slabs.
 - 2. Joints between different materials listed above.
- C. Interior Joints in Vertical Surfaces and Horizontal Nontraffic Surfaces:
 - 1. Control and expansion joints on exposed interior surfaces of exterior walls.
 - 2. Perimeter joints of exterior openings.
 - 3. Control and expansion and inside corner joints in tile.
 - 4. Vertical joints on exposed surfaces of interior unit masonry walls.
 - 5. Perimeter joints between interior wall surfaces and frames of interior doors windows.
 - 6. Joints between plumbing fixtures and adjoining walls, floors, and counters.
- D. Interior Joints in Horizontal Traffic Surfaces:
 - 1. Isolation joints in cast-in-place concrete slabs.

1.2 WARRANTY

- A. Installer: Two years.
- B. Manufacturer: Ten years.

1.3 MATERIALS

- A. Elastomeric Joint Sealants: Liquid applied, chemically curing; ASTM C 920.
 - 1. Pourable neutral-curing silicone sealants.
 - 2. Nonsag neutral-curing silicone sealants.
 - 3. Acid-curing silicone sealants.
 - 4. Mildew-resistant neutral-curing silicone sealants.
 - 5. Nonsag and Pourable urethane sealants.
- B. Latex Joint Sealants: ASTM C 834, Type P, Grade NF.

- C. Acoustical Joint Sealants: Latex.
- D. Preformed Tape Sealants: Back-bedding mastic, butyl based.
- E. Joint-Sealant Backing: Cylindrical Closed Cell Elastomeric tubing.

END OF SECTION 07920

SECTION 08110 - STEEL DOORS AND FRAMES

1.1 SUMMARY

- A. Standard hollow metal doors and frames.

1.2 QUALITY ASSURANCE

- A. Standard Hollow Metal Quality Standard: ANSI/SDI A250.8.

1.3 PRODUCTS

- A. Standard Hollow Metal Doors:

1. Design: Flush panel.
2. Thermal-Rated Doors: Exterior.
3. Exterior Doors: 16 ga. Galvanized steel sheet faces.
 - a. Model: 1 (Full Flush)
 - b. Tob of Door: Provide closed top design sealed against water intrusion.
4. Interior Doors: 18 ga. cold-rolled steel sheet faces.
 - a. Model: 1 (Full Flush).

- B. Standard Hollow Metal Frames:

1. Exterior Frames: Galvanized steel sheet; face welded.
 - a. 14 ga thick steel sheet.
 - b. Rigid insulation
2. Interior Frames: Cold-rolled steel sheet; face welded.
 - a. 16 ga thick steel sheet up to 4 foot opening, 14 ga. over 4 foot.

- C. Finishes: Factory priming for field painting.

1.4 INSTALLATION

- A. Concrete and Masonry Walls: Frames filled with grout.

END OF SECTION 08110

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SECTION

08211 - FLUSH WOOD DOORS

1.1

QUALITY ASSURANCE

- A. Quality Standard: AWI.
 - 1. AWI Quality Certification Labels or an AWI letter of licensing for doors.
- B. Fire-Rated Wood Doors: Comply with IBC for pressure testing.

1.2 DOOR CONSTRUCTION, GENERAL

- A. Low-Emitting Materials: Made with adhesives and composite wood products that do not contain urea formaldehyde.

1.3 VENEERED-FACED DOORS FOR TRANSPARENT FINISH

- A. Exterior Solid-Core Doors Not acceptable
- B. Interior Solid-Core Doors:
 - 1. Grade: Premium, with Grade A faces .
 - 2. Species: Red oak.
 - 3. Cut: Plain sliced (flat sliced), Quarter sliced, or Rift cut. Rotary cut is unacceptable.
 - 4. Match between Veneer Leaves: Book; Slip or Pleasing match.
 - 5. Assembly of Veneer Leaves on Door Faces: Balance match.
 - 6. Edge: Matching veneer
 - 7. Special Matching:
 - a. Pair and set match.
 - b. Room Match: Door faces of compatible color and grain within each room.
 - c. Blueprint matching.
 - 8. Core: Particleboard.
 - 9. Construction: Five or seven plies, bonded.

- C. Interior Hollow-Core Doors Not acceptable:

1.4 LOUVERS AND LIGHT FRAMES

- A. Louvers: Not acceptable.

B. Light-Opening Frames:

1. Metal.

1.5 PRIMING/FINISHING

A. Factory Finishing: All doors.

B. Transparent Factory Finishes:

1. Grade: Premium.
2. Finish: Catalyzed polyurethane.
3. Effect: Semifilled finish.

END OF SECTION 08211

SECTION 08311 - ACCESS DOORS AND FRAMES

1.1 SUMMARY

- A. Access doors and frames for walls and ceilings.
- B. Floor access doors and frames.

1.2 QUALITY ASSURANCE

- A. Fire-Rated Vertical Access Doors and Frames: NFPA 252 or UL 10B.
- B. Fire-Rated Horizontal Access Doors and Frames: ASTM E 119 or UL 263.

1.3 PRODUCTS

- A. Access Doors and Frames for Walls and Ceilings:
 - 1. Type:
 - a. Flush access doors and frames with exposed trim.
 - b. Fire-rated, insulated, flush access doors and frames with exposed trim.
 - 2. Material: Steel (except in restrooms); Stainless steel (in restrooms).
 - 3. Fire-Resistance Rating: As required to match wall or ceiling rating..
 - 4. Latch: Self-latching bolt operated by screwdriver with interior release.
- B. Finishes:
 - 1. Steel: Primed finish.
 - 2. Stainless Steel: Directional satin, No. 4 finish.

END OF SECTION 08311

SECTION 08331 - OVERHEAD COILING DOORS

1.1 PERFORMANCE REQUIREMENTS

- A. Basic Wind Speed, Exterior Doors: 90 mph. Operability under wind load is required.

1.2 DOOR ASSEMBLY

- A. Insulated Service Door: Door curtain of galvanized steel with end locks, and wind locks.
- B. Finish: Powder coated.
- C. Hood: Galvanized steel.
- D. Electric Door Operator: Standard duty, up to 60 cycles per hour.
 - 1. Obstruction-detection device.
 - 2. Momentary Contact Remote-control station.
 - 3. Other Equipment: Audible and visual signals Radio-control system.

1.3 INSTALLATION

- A. Factory-authorized representative to perform startup service and testing and train Owner's personnel.

END OF SECTION 08331

SECTION 08411 - ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS

1.1 SUMMARY

- A. Exterior storefront framing.
- B. Exterior manual-swing entrance doors and door-frame units.

1.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance:
 - 1. Wind Loads: 20 psf.

1.3 MAINTENANCE SERVICE

- A. Entrance Door Hardware: Twelve months.

1.4 MATERIALS

- A. Aluminum: Alloy and temper recommended by manufacturer.
- B. Steel reinforcement.

1.5 FRAMING SYSTEMS

- A. Framing Members: Manufacturer's standard extruded-aluminum framing members.
 - 1. Construction: Thermally broken.
 - 2. Glazing System: Retained mechanically with gaskets on four sides.
- B. Brackets and reinforcements.
- C. Fasteners and accessories.
- D. Concrete and masonry inserts.
- E. Concealed Flashing: Manufacturer's standard corrosion-resistant, nonstaining, nonbleeding flashing
- F. Framing system gaskets and sealants.

1.6 GLAZING SYSTEMS

- A. Glazing: As specified in Division 8 Section "Glazing."
- B. Glazing gaskets.
- C. Spacers and setting blocks.
- D. Bond-breaker tape.
- E. Glazing Sealants:
 - 1. Weatherseal sealant.

1.7 ENTRANCE DOOR SYSTEMS

- A. Entrance Doors:
 - 1. Door Construction: 1-3/4-inch overall thickness.
 - 2. Door Design: medium stile rails with 10" bottom rail and 5" top rail.
 - 3. Glazing stops and gaskets.
- B. Entrance Door Hardware: Division 8 Section "Door Hardware."

1.8 ALUMINUM FINISHES

- A. Aluminum Finishes: Class II, clear or color anodic.

1.9 SOURCE QUALITY CONTROL

- A. Structural-Sealant-Glazed Systems: Tested and inspected according to ASTM C 1401 recommendations.

END OF SECTION 08411

SECTION 08470 - REVOLVING ENTRANCE DOORS

1.1 SUMMARY

- A. Four-wing, manual revolving entrance doors.

1.2 WARRANTY

- A. Materials and Workmanship for Revolving Entrance Door Assemblies: Three years.
- B. Materials and Workmanship for Speed-Control Units: Five years.

1.3 MAINTENANCE SERVICE

- A. Full-Maintenance Service: 12 months.

1.4 COMPONENTS

- A. Door Wings: Stile and rail.
 - 1. Material: Extruded aluminum.
 - 2. Glazing: Clear tempered glass.
 - 3. Stile Design: Medium stile; 3-1/2-inch nominal width.
 - 4. Diameter: 7' diameter.
- B. Enclosure Walls: Curved with single-bend glass lites.
 - 1. Material: Extruded aluminum.
 - 2. Glazing: Clear tempered glass.
- C. Ceilings: Metal-clad plywood or Metal.
- D. Canopy and roof.
- E. Floors: Mats.
- F. Movable door-wing assembly to permit folded door wings to be moved to one side of door enclosure.
- G. Fabrication: Mechanically joined construction.
- H. Finishes:
 - 1. Aluminum: Class I, clear anodic finish.

END OF SECTION 08470

SECTION 08520 - ALUMINUM WINDOWS

1.1 PERFORMANCE REQUIREMENTS

- A. Engineering design of aluminum windows by Contractor.
- B. Basic Wind Speed: 90 mph.

1.2 QUALITY ASSURANCE

- A. Quality Standard: AAMA/WDMA 101/I.S.2/NAFS.

1.3 WINDOWS

- A. Type: Fixed- thermal break construction
- B. Sub Sill: Provide aluminum sub sill with vertical legs turned up at the back and ends and with all joints sealed to shed water to the outside of the building.
- C. U-Factor: 0.43 Btu/sq. ft. x h x deg F or less.
- D. Solar Heat-Gain Coefficient: Whole-window SHGC maximum of 0.50.
- E. Glazing: Site glazed.
 - 1. Glass: See Glazing Section.
 - 2. Glazing System: Manufacturer's standard.
- F. Finishes: Class II, clear or color anodic- Dark Bronze.

END OF SECTION 08520

SECTION 08620 - UNIT SKYLIGHTS

1.1 QUALITY ASSURANCE

- A. Quality Standard: AAMA/WDMA 101/I.S.2/NAFS.

1.2 WARRANTY

- A. Materials and Workmanship: Five years.

1.3 MATERIALS

- A. Fiberglass-Sandwich-Panel Glazing: Translucent, fiberglass-reinforced-polymer face sheets with a grid core (Kallwall).
- B. Glazing Gaskets: Manufacturer's standard.

1.4 UNIT SKYLIGHTS

- A. Integral Curb: Extruded-aluminum, self-flashing type.
- B. Thermal break.
- C. Finishes: Class II, clear anodic.

END OF SECTION 08620

SECTION 08710 - DOOR HARDWARE

1.1 SUMMARY

- A. Commercial door hardware for swinging doors.

1.2 MAINTENANCE SERVICE

- A. Full-Maintenance Service: Twelve months.

1.3 PRODUCTS

- A. Hinges:

1. Aluminum Doors: Gear type extruded aluminum heavy duty anodize to match window system
2. Interior: Brass or Steel.
3. Fire-Rated Assemblies: Steel.
4. Options: maximum security pin on outswinging exterior doors and nonremovable pins on outswinging corridor doors.

- B. Continuous Hinges:

1. Gear Type: Extruded aluminum- HD.

- C. Mechanical Locks and Latches:

1. Cylindrical Lockset Design: Best (no substitution- matching existing campus system) 9K series heavy duty lever locks Model 93K7 with Lost Motion (LM) option (allows lever to turn when locked) with 15K lever style.

- D. Auxiliary Locks and Latches: Grade 1.

- E. Door Bolts:

1. Dustproof Strikes: Grade 1.

- F. Exit Devices: Sargent (no substitution- matching existing campus system).

1. Panic exit devices.
2. Fire exit devices.
3. Outside Trim: Match locksets and latchsets.

- G. Cylinders and Keying:

1. Cylinders: High security.

- a. Grade 1.
- b. Number of Pins: Seven.
- c. Cores: Interchangeable.
- 2. Construction Keying: Construction cores.
- 3. Keying System:
 - a. Great-grand master key.
 - b. Locks master keyed or grand master keyed to existing system.
 - c. All cylinders keyed alike.
 - d. Keys: Nickel silver.

H. Key-Control System:

- 1. Cabinet: Grade 1, wall mounted.
- 2. Index System: Multiple index, computer software.

I. Key lock boxes.

J. Operating Trim: Stainless steel.

K. Closers: LCN (no substituiton- matching existing campus system)

- 1. Surface: Grade 1.
- 2. Closer holder release devices.
- 3. Coordinators.

L. Protective Trim Units: Stainless steel.

M. Stops and Holders:

- 1. Stops and Bumpers.
- 2. Silencers for metal door frames w/o smoke seals.

N. Door Gasketing: As required for rating and acoustics.

O. Finishes: US 26D

1.4 FIELD QUALITY CONTROL

A. Occupancy Adjustment: Twelve months.

END OF SECTION 08710

SECTION 08800 - GLAZING

1.1 SUMMARY

A. Glazing required for the following:

1. Windows.
2. Doors.
3. Glazed entrances.
4. Interior borrowed lites.
5. Storefront framing.

1.2 WARRANTY

- A. Deterioration of Coated Glass: Not less than 10 years.**
- B. Deterioration of Insulating Glass: Not less than 10 years.**

1.3 MATERIALS

A. Glass Products:

1. Annealed Float Glass: Clear and Tinted.
2. Heat-Treated Float Glass: fully tempered.
3. Coated Float Glass: Pyrolytically or Sputter coated.
4. Wired Glass: Square pattern.
5. Insulating Glass: Manufacturer's standard dual-seal units.

B. Silicone Glazing Sealants: Neutral or basic curing, Class 25.

C. Glazing Tapes: Back-bedding-mastic type.

D. Glazing Gaskets: Dense compression.

1.4 GLASS UNITS

A. Monolithic Float-Glass Units:

1. 6 mm clear

B. Monolithic Wired-Glass Units:

1. 6 mm clear, square pattern

C. Insulating-Glass Units:

1. Tinted outer 6 mm lite, 1/2" air space, 6mm clear inner lite with low E coating on 3rd surface.

END OF SECTION 08800

SECTION 08911 - GLAZED ALUMINUM CURTAIN WALLS

1.1 SUMMARY

- A. Conventionally glazed aluminum curtain walls installed as stick or unitized systems.

1.2 QUALITY ASSURANCE

- A. Contractor to engineer glazed aluminum curtain-wall systems to comply with performance requirements.

1.3 WARRANTY

- A. Assembly Warranty: 10 years.

1.4 COMPONENTS

- A. Framing Systems: Aluminum with steel reinforcement (if required).
- B. Glazing Systems:
 - 1. Glazing: Specified in Division 8 Section "Glazing."
 - 2. Gaskets: Pressure-glazing system.
 - 3. Glazing Sealants: As recommended by manufacturer.
- C. Aluminum Finishes: Class II, clear or color anodic.

1.5 FABRICATION

- A. Provisions for field replacement of glazing from exterior.

END OF SECTION 08911

SECTION 09111 - NON-LOAD-BEARING STEEL FRAMING

1.1 SUMMARY

- A. Non-load-bearing steel framing members for interior framing and suspension systems.

1.2 MATERIALS

A. Suspension Systems:

- 1. Wire hangers.
- 2. Flat hangers.
- 3. Carrying channels.
- 4. Furring channels.
- 5. Grid suspension systems for ceilings.

B. Steel Framing for Framed Assemblies:

- 1. Studs and runners: minimum 20 ga Space studs at 16" O.C.
- 2. Studs at door jambs: 16 ga. studs to structure or cross bracing.
- 3. Slip-Type Head Joints:
 - a. Single long-leg runner.
 - b. Double runner.
 - c. Deflection track.
- 4. Firestop track.
- 5. Flat strap and backing plate.
- 6. Cold-rolled channel bridging.
- 7. Hat-shaped, rigid furring channels.
- 8. Resilient furring channels.
- 9. Cold-rolled furring channels.
- 10. Z-shaped furring.

END OF SECTION 09111

SECTION 09250 - GYPSUM BOARD

1.1 SUMMARY

- A. Interior gypsum board.

1.2 MATERIALS

- A. Interior Gypsum Board: Minimum 5/8" thick.
 - 1. Regular type.
 - 2. Type X.
 - 3. Ceiling Type: Manufactured to have more sag resistance than regular-type gypsum board.
 - 4. Moisture- and mold-resistant type.
- B. Trim Accessories:
 - 1. Interior- muddable types only where exposed to view.

1.3 INSTALLATION

- A. Install gypsum board vertically unless the space is too high for single panels.

END OF SECTION 09250

SECTION 09310 - CERAMIC TILE

1.1 SUMMARY

- A. Ceramic mosaic, paver, glazed wall and special-purpose tile.
- B. Stone thresholds installed as part of tile installations.
- C. Crack-suppression membrane for thin-set tile installations.
- D. Metal edge strips installed as part of tile installations.

1.2 MATERIALS

- A. Glazed Wall Tile Trim Shapes: Coved base Straight base Surface bullnose cap Bullnose external corner.
- B. Ceramic Mosaic Trim Shapes: Coved base.
- C. Thresholds: Marble.
- D. Crack-Suppression Membranes: Chlorinated polyethylene sheet PVC sheet Polyethylene sheet Corrugated polyethylene Fabric-reinforced, modified-bituminous sheet Fabric-reinforced, fluid-applied rubber Urethane waterproofing and tile-setting adhesive.
- E. Elastomeric Sealants: One-part, mildew-resistant silicone.

1.3 FLOOR TILE INSTALLATION SCHEDULE

- A. Interior Floors on Concrete: Cement mortar bed bonded to concrete.
 - 1. Tile Type: Unglazed ceramic mosaic tile.
 - 2. Mortar: Latex- portland cement mortar bond coat.
 - 3. Grout: Polymer-modified sanded grout.
- B. Interior Floors on Crack-Suppression Membrane over Concrete: Thin-set mortar.
 - 1. Tile Type: Unglazed paver tile.
 - 2. Mortar: Latex- portland cement mortar bond coat.
 - 3. Grout: Polymer-modified sanded grout.

1.4 WALL TILE INSTALLATION SCHEDULE

- A. Interior Walls over Masonry or Concrete: Cement mortar bed.

1. Tile Type: Glazed wall tile.
2. Mortar: Latex- portland cement mortar bond coat.
3. Grout: Interior Walls over Masonry or Concrete: Cement mortar bed bonded to substrate.
4. Tile Type: Glazed wall tile.
5. Mortar: Latex- portland cement mortar bond coat.
6. Grout: Polymer-modified unsanded grout.

B. Interior Walls over Gypsum Board on Metal Studs: Organic adhesive.

1. Tile Type: Glazed wall tile.
2. Grout: Polymer-modified unsanded grout.

END OF SECTION 09310

SECTION 09511 - ACOUSTICAL PANEL CEILINGS

1.1 SUMMARY

- A. Acoustical panels and exposed suspension systems.

1.2 QUALITY ASSURANCE

- A. Acoustical Panel Quality Standard: ASTM E 1264.
- B. Metal Suspension System Quality Standard: ASTM C 635.

1.3 MATERIALS

- A. Acoustical Ceiling Panels:
 - 1. Type and Form: Type III, mineral base with painted finish; Form 2, water felted.
 - 2. Pattern: E (lightly textured) or G (smooth).
 - 3. LR: Not less than 0.90.
 - 4. NRC: Not less than 0.70.
 - 5. CAC: Not less than 25.
 - 6. Thickness: 3/4 inch.
 - 7. Modular Size: 24 by 24 inches with reveal (tegular) edge.
- B. Metal Suspension Systems:
 - 1. Wire hangers, braces, and ties.
 - 2. Hanger rods.
 - 3. Angle hangers.
 - 4. Seismic perimeter stabilizer bars, struts, and clips.
 - 5. Wide-Face, Capped, Double-Web Steel: Intermediate duty.
- C. Metal Edge Moldings and Trim: "Step" also known as "shadow" type edge molding.
- D. Acoustical sealants.

1.4 INSTALLATION

- A. Installation: UBC Standard 25-2.

END OF SECTION 09511

SECTION 09512 - ACOUSTICAL TILE CEILINGS

1.1 SUMMARY

- A. Acoustical tiles directly attached to substrates with adhesive.

1.2 QUALITY ASSURANCE

- A. Acoustical Tile Quality Standard: ASTM E 1264.

1.3 MATERIALS

- A. Acoustical Ceiling Tiles:
 - 1. Type III, mineral base with painted finish; Form 4, cast.
 - 2. Color: White
 - 3. Pattern: D (fissured).
 - 4. LR: Not less than 0.70.
 - 5. NRC: Not less than 0.70.
 - 6. CAC: Not less than 25.
 - 7. Thickness: 3/4 inch.
 - 8. Modular Size: 12 by 12 inches.
- B. Metal Edge Moldings and Trim: Extruded aluminum.
- C. Acoustical sealants.

END OF SECTION 09512

SECTION 09653 - RESILIENT WALL BASE AND ACCESSORIES

1.1 PRODUCTS

A. Resilient Base:

1. Type (Material Requirement): TS (rubber, vulcanized thermoset).
2. Group (Manufacturing Method): I (solid).
3. Style: Cove (with top-set toe) for vinyl tile and sealed concrete
4. Style: Straight for carpet tile.
5. Minimum Thickness: 0.125 inch.
6. Height: 4 inches.
7. Lengths: Coils in manufacturer's standard length.
8. Outside Corners: Job formed.
9. Inside Corners: Job formed.
10. Surface: Smooth.

B. Resilient Molding Accessory: Rubber.

1. Transition strips.

C. Installation Materials:

1. Trowelable leveling and patching compounds.
2. Adhesives.

END OF SECTION 09653

SECTION 09681 - CARPET TILE

1.1 QUALITY ASSURANCE

- A. Mockups for each type of carpet tile installation.

1.2 MATERIALS

- A. Carpet Tile: (State Contract- DATC Campus Standard) Subject to compliance with requirements, provide one of the following:
 - 1. Interface "Pathways" 182, IC50 CM, Style: 1672602S00, Color: 5691 Brown.

1.3 INSTALLATION

- A. Installation Method: Glue down with releasable adhesive.

END OF SECTION 09681

SECTION 09912 - INTERIOR PAINTING

1.1 SUMMARY

- A. Surface preparation and the application of paint systems on interior substrates.

1.2 QUALITY ASSURANCE

- A. Quality Standards: "MPI Approved Products List" and "MPI Architectural Painting Specification Manual."
- B. Mockups for each color and finish.

1.3 INTERIOR PAINTING SCHEDULE

- A. CMU Substrates:
 - 1. One coat latex block filler, two coats acrylic enamel.
- B. Steel Substrates:
 - 1. One coat primer, one coat undercoater, top coat alkyd enamel.
- C. Galvanized-Metal Substrates: (roof deck)
 - 1. Water-Based Dry-Fall System: MPI INT 5.3H.
- D. Gypsum Board Substrates:
 - 1. 2 coats acrylic enamel over primer.

END OF SECTION 09912

SECTION 10101 - VISUAL DISPLAY SURFACES

1.1 QUALITY ASSURANCE

- A. Mockups for each form of construction.
- B. Composite wood products made without urea formaldehyde.

1.2 WARRANTY

- A. Materials and Workmanship for Porcelain-Enamel Face Sheets: 50 years.

1.3 PRODUCTS

- A. Porcelain-Enamel Face Sheet: Manufacturer's standard steel.
- B. Markerboard Assemblies: Porcelain enamel.
- C. Tackboard Assemblies: Plastic-impregnated cork.
- D. Sliding Visual Display Units:
 - 1. Horizontal-Sliding Units: Two track.
- E. Visual Display Conference Units: Wood cabinets.
- F. Markerboard Tackboard Accessories:
 - 1. Aluminum frames.
 - 2. Trim: Factory-applied aluminum.
 - 3. Chalktray: Box or Solid type.
 - 4. Map rail with display rail clips.
- G. Wood Species and Finishes: Red oak; natural lacquered finish.
- H. Aluminum Finishes: Class II, clear anodic.

1.4 FABRICATION

- A. Visual Display Boards: Factory assembled.

END OF SECTION 10101

SECTION 10155 - TOILET COMPARTMENTS

1.1 SUMMARY

- A. Phenolic-core toilet compartments configured as follows:
 - 1. Toilet-Enclosure Style: Overhead braced Floor anchored.
 - 2. Urinal-Screen Style: Post to ceiling.

1.2 QUALITY ASSURANCE

- A. Flame-Spread Index: 25 or less.

1.3 COMPONENTS

- A. Phenolic-Panel Cores: Dark-color.
- B. Urinal-Screen Post: square aluminum tube with satin finish.
- C. Brackets (Fittings):
 - 1. Full-Height (Continuous) Type: Stainless steel or clear anodized aluminum angles.
- D. Hardware and Accessories: Institutional quality Stainless steel.

END OF SECTION 10155

SECTION 10522 - FIRE EXTINGUISHER CABINETS

1.1 PRODUCTS

A. Fire Protection Cabinet:

1. Type: For 10# fire extinguisher.
2. Construction: Nonrated or 1-hour fire rated, or 2-hour fire rated- coordinate with wall type.
3. Mounting: Semirecessed.
4. Door Style: Vertical duo panel with frame Center glass panel with frame.
5. Door Glazing: Tempered break glass.
6. Accessories: Door locks.
7. Finish: Door and Frame: Stainless-steel #4 finish.
8. Body: Steel, baked enamel or powder coated.

END OF SECTION 10522

SECTION 10523 - FIRE EXTINGUISHERS

1.1 SUMMARY

- A. Hand-carried fire extinguishers.

1.2 QUALITY ASSURANCE

- A. Fire Extinguishers: NFPA 10.

1.3 WARRANTY

- A. Materials and Workmanship: Six years.

1.4 PRODUCTS

- A. Portable, Hand-Carried Fire Extinguishers:
 - 1. 4A60BC (10#) Multipurpose dry-chemical type, manufacturer's standard container with chrome plated brass valve (aluminum not acceptable).
- B. Mounting Brackets: Galvanized steel with identification lettering.

END OF SECTION 10523

SECTION 10801 - TOILET AND BATH ACCESSORIES

1.1 SUMMARY

A. Public-Use Washroom Accessories:

1. Toilet Tissue Dispenser: Not in Contract- vendor supplied.
2. Paper Towel Dispenser: Not in Contract- vendor supplied.
3. Waste Receptacle: Owner supplied garbage can.
4. Liquid-soap dispenser: Not in Contract- vendor supplied.
5. Grab bar: Stainless Steel, concealed fasteners
6. Vendor: Sanitary napkin and tampon, Stainless Steel, Semi-recessed, coin operation.
7. Sanitary-napkin disposal unit: Stainless Steel
8. Mirror unit: Stainless Steel frame.

B. Childcare Accessories:

1. Diaper-changing station.

C. Underlavatory guards. (If using wall mounted sinks)

D. Custodial Accessories:

1. Stainless Steel Mop and broom holder with shelf.

1.2 WARRANTY

- A. Silver Spoilage for Mirrors: 15 years.**

END OF SECTION 10801

SECTION 11132 - PROJECTION SCREENS

1.1 MATERIALS

- A. Manually Operated Projection Screens: (classrooms)
 - 1. Bracket-mounted or ceiling-suspended, metal-encased screens.
- B. Electrically Operated Projection Screens:(conference room)
 - 1. Surface-mounted, metal-encased screens.
 - 2. Suspended screens without ceiling closure.
- C. Front-Projection Screen Material: Multipurpose reflective viewing surface.
 - 1. Size: As appropriate for room size.

END OF SECTION 11132